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DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION

VOL. 77 SEPTEMBER, 1956 NO. 1

GEOGRAPHY NUMBER

EDITORS

HENRY J. WARMAN, Graduate School of Geography, Clark University
and
ZOE THRALLS, Department of Geography, Univ. of Pittsburgh

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EDUCATION

VOL. 77 SEPTEMBER, 1956 NO. 1

Environmental Impactors

By HENRY J. WARMAN

Graduate School of Geography, Clark University
Worcester, Massachusetts

ONE of the surest procedures to induce student apathy and disinterest in regional geography is to deal with regions in an encyclopedic manner. Reference hereby is made to the technique which calls for rote treatment of location, area, shape, relief, weather, climate, soils, vegetation, imports, exports and the like to region after region with no discrimination as to the relative weight of each item and with even less regard for the relationships of even two or more, to say nothing of the inter-relationships of all. Such technique never enables a student to achieve a geographic discipline —a discipline which aims to grasp the "life motif" of man in any given region at any given time. This encyclopedic way of dealing with the physical and cultural elements of geography (see chart) may be likened to that which a chemistry teacher may use if he were to say to a student, "Fill up these twenty-five test tubes, putting one element in each tube. After you are through you know chemistry." Surely the student would be justified in asking, "What would happen if I mixed a few of these materials? What impact would each have on the others?"

In like manner the young geographer might well ask, "What impact do the physical elements, the cultural elements, and man have on each other in this or that region?"

Environmental Impactors versus Factors

The term impactor is more useful in modern geography than the term factor. It implies a going-or coming-together, whereas factor has the connotation of static fact. Let us see how one may use the idea of environmental impactors. Weather and climate, so called physical elements of geography, are universal. They affect man everywhere. But man is not passive to them. He re-acts. The impacts go both ways—climate to man, man to climate. Climate and weather affect land forms—but land forms have an effect upon climate patterns. Climate, land forms, soils, natural vegetation are so intimately related that an encyclopedic treatment does not do justice to their inter-relationships. All four —climate, landforms, soils, natural vegetation make impact on man, but man reacts and is constantly making an impact in return. As we develop in our students this concept of the man-to-land tie or land-to-man tie in any given region we are creating a geographic way of thinking.

Interaction Pervades All Impactors

The idea of the man-to-land ties can be carried much further. For example, we can, in a given region, interrelate the weather and climate, land forms, soils, vegetation, and man with land-use and land tenure. These last two are man-made features of the environmental complex.

The second, land tenure, may be related to the family, the government, law and even to religion. Certainly the more tangible aspects of the cultural impactors such as land use, science, industry, commerce, transport and even architecture, can be and are taught by the geographer. He should go one step further and show the inter-relationships of all the above tangible aspects of culture with the physical impactors. When he does this by bringing them all to bear on man in a region—putting them all *someplace*, that is—he is striving to reach a high plane of geographic thinking.

Even the intangible aspects of culture such as language, literature, religion, morality, education make mutual impact on the tangible cultural elements as well as on the physical geographic elements. While the intangible impactors are often hard to map they ought not be ignored if teachers are to get away from encyclopedic treatment of geography.

Patterns Need To Be Studied

Geographers advocate and make every effort possible to do field work. But even if a geographer could visit all places on a continent he would not be able to see patterns. This he does by mapping his findings. After careful plotting—and a high degree of integrity is essential—he sits and "milks his maps dry." What does each map reveal? What do two maps reveal when studied together? What do all the maps portray when all are studied together? Out of such intensive study there evolves overview, review and preview of things present and things to come. This is the "mixing process" referred to earlier. All elements—physical, cultural, and man-in a region are needed to achieve the totality of the environmental complex and to arrive at a "life motif" for that area.

Teachers Select the Dominant Elements

"There is a geography for every age." One may add to this quotation and say that for teachers, "There is a geography for every age and the important phases must be selected by the teacher for the grade level at which it is to be taught." China for grade four should be quite different from China for grade eight or grade twelve, or for College Sophomores.

The teacher's responsibility is to achieve depth of knowledge of each physical and cultural impactor. The next step is to see their impacts on each other and on man *in a place*, and finally to efficiently portray and lead students to understand a region's personality within their competence to do so.

One may ask how can a person ever know all the facts about all the impactors? This question is best answered by saying, "Therein lies the greatest asset of the geographic discipline—the world grows ever larger, the horizon is always beyond our reach."

The Significance *of* Human Geography Today

By JOHN WESLEY COULTER

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Cincinnati, Ohio

Doctor Coulter is the author of more than one hundred monographs, field studies, articles and books in the field of geography and in education. A veteran of World War I he also served in World War II as a Colonel on the General Staff in Washington.—Editor

HUMAN geography is one of the more important subjects in the curriculum of education of the United States. Indeed at this stage in the history of our country it could be argued the most important. First of all, it helps boys and girls to know their own country and its landscape. It supplies a background of information about people and places which makes travel in the United States and abroad more interesting and, therefore, more pleasurable. It is a help in understanding history when history is taught as history and geography as geography. It introduces intelligently the common bonds and relationships of people in different countries. The rôle of leadership of the United States in the world of today demands a knowledge of the people it leads, the more so because of the shrinkage of the world in terms of time as well as in accessible places. Instructions in human geography is basic for the fullest understanding of difficult world situations, for training personnel for future positions in international business, and last but not least for intelligent voting and for performing the urgent duties and increasing responsibilities of American citizenship.

Definition

Human geography is the study of people with special reference to the place where they live. The pupil is taught how the people of such and such an area have come to be as they are because of the place where they live. The teacher helps him to understand just how far the environment explains the way of living of a group of people. Human geography goes further for it studies man in terms of the relationships which have come from both his natural and social surroundings. The way of living of a human group appears as one of adjustment and adaptation to the geographical environment widely interpreted with respect to factors of both a physical and cultural nature.

At Home and Abroad

One of the primary objectives of education is to help students to know their own country and its landscapes. The pleasures of the natural environment—mountains, valleys, plains and sunny climates are enhanced by knowing something about them and the uses human beings make of them. An understanding of why people use land one way on the floodplain of a river, another

way on the valley slopes and still a different way higher up adds to the enjoyment of looking at landscapes. Training in the powers of observation,—in the ability to see when we look, is part of a good education of every boy and girl. Why a city is located where it is, why it has a particular shape when we see it on a map, why it developed along the lines that it did, and how the general appearance of its districts are explained,—the answers to all these questions satisfy a healthy and intelligent interest which can be aroused in boys and girls in their teens.

The same training which gives students an appreciation of their own country is carried over when they go abroad. For example, landscapes, cities, buildings and the people of Europe are introduced intelligently. The lack of knowledge of human geography during World War II was a serious handicap to young men in the armed forces overseas. Those who were taken to far-off places had little or no background for interpreting what they saw. Their experiences in different lands and among different peoples left impressions which were sometimes wrong and for the most part inadequate. How often has a student under the "G I Bill" said to the writer after class, "If I had had one course in human geography before I went into the service, how much more intelligent I would have been about the people and places I saw!"

Human Geography and History

The study of human geography makes history more intelligible, for the former studies people in space, the latter in time. Human geography is a study of people in a place at a given time or moment of time. History, on the other hand, the study of people in terms of time, thus gives perspective to human geography. The past perpetuates itself by habits of thought which are crystallized in the organization of the space which a human group occupies in the present. Geography and history go side by side. Some landscapes of southern France can only be understood when we know that Gourdon and other towns were established in sites difficult of access at a time when protection from pirates in the Mediterranean was the prime consideration.

There is considerable doubt that history and geography may be successfully merged in a third subject called "social studies." The inclusion of such a title in a school curriculum to include an assorted collection of themes and topics suggests that geography and history are being poorly taught. An improvement in the teaching of these subjects is not necessarily achieved by their fusion. The subjects of History and Geography have been passed down to us because, like other disciplines, they fulfill a certain demand for knowledge. Each has ways of thinking with organized structures of its own. Of course, it is the first requisite of a good teacher that he himself should know well the subject which he is to help others to learn. Less training in history and fewer studies in geography will not make a stronger "social studies" teacher.

A Positive Approach

As an example of an approach to human geography, a study of India, a monsoon country, could be centered around a graphic description of life in a village on the lower Ganges plain: It would include what an alluvian plain looks like, the materials used in building houses,

how Hindus dress, the kinds of crops they raise and when they are planted, the food the peasants eat and how it is cooked, the fuel, the organization of the villagers into social groups or castes, the prevalence of malaria in the rainy season and why then, and so on. A lesson approached in this way gives students a good impression of the human geography of a large section of Asia. The successful teaching of this subject in elementary schools depends on the introduction of simple studies of real life. Furthermore "Journey geography," immensely successful, lays the groundwork for wider points of view of the world in the higher grades.

In International Affairs

Since the specific contribution of Geography to the social sciences is the organization of space, that study introduces intelligently relationships of people in different countries. Under the sub-heading of regional geography, the adjustments of conflicting political interests must be found in an understanding of the aerial relationships of human societies—their ethnic characteristics, the surroundings in which they live, how they use their material resources, the physical or other barriers which divide them and the communications which unite them. The aim of international societies can be understood fully only by fitting them into the environment of which they are a part. An example will illustrate this point.

In Japan, events are taking a turn of potential danger to the United States, to security and world peace, partly out of American ignorance (despite eight years of occupation) of the basic needs of the people as determined by their man-to-land relationships. A chronic lack of raw materials, scarcity of cultivable land, and an appalling increase in population pressure present even greater problems than those faced in prewar years. The main problem which a Japanese father faces today is that of providing food for his family. American post-war aid, generous though it has been, is recognised merely as a palliative to postpone the evil day when reality must be faced if a proud nation is to survive. The greatest threat to the modern west may well be from the teeming millions of the Orient. How are we teaching people to understand them?

How many boys and girls in our schools know anything about the people of Nepal, that busy little mountain kingdom of six-and-a-half million people? However, the King of Nepal has an embassy in Washington and half-a-dozen Nepalese are studying at Universities in the United States. Nepal is vital for the defense of India, much more vital than Tibet. The Nepalese, however, resent interference from India and from any other foreign state. Maps made in China in 1954 include Nepal as part of China!

World Leadership of U. S. A.

At this epoch in the history of the United States, its pre-eminent position in international affairs demands a sound background of world human geography. The United States developed largely in detachment from the rest of the world, for there was enough to do in the nineteenth century to know, acquire and develop the continent from the Atlantic to the Pacific. During that time a good knowledge of the geography of other lands was not considered a necessary part of secondary education. Principally as a result of two great wars, a new

world situation has developed in which the United States suddenly finds itself the leader. In place of a minor power choosing to be aloof from the conflicts of Europe of a few generations back, it has rapidly developed into the strongest power among the Free Nations, indeed into the strongest power in the world. This pre-eminent position has brought to the United States the economic, political and military potential to command attention in any part of the globe. Economically under the "Point 4" program we are now competing with Soviet Russia in giving aid to underdeveloped countries. Financially we are the world's bank. Militarily we have the most powerful army with units in both the Orient and the Occident armed with atomic weapons. Such a unique position brings with it a responsibility not only for our own future, but also for the fate of the world as a whole. The emphasis is now on education for a contemporary world in which the United States plays a leading rôle.

The general aims of the Foreign Policy of the United States can be achieved only if we know well the socio-economic -geographic realities of the various parts of the world to which that policy is applied. We have to understand the people we are dealing with and know them in their own background. That is the only way to make loyal friends. In making professional decisions, the United States will have to act with maturity, balance and perspective which come ultimately from a knowledge of other peoples, problems and places. The beginning of that knowledge for leadership is inculcated in the study of human geography in the public schools.

An important factor that has made a knowledge of other lands and peoples essential to the welfare of the United States is the shrinkage of the world in terms of time. Every land and sea has undergone a sensational reduction in scale, making all nations neighbors in the literal sense of that term. A strato cruiser goes from Seattle to Tokyo in fifteen hours. Few of the phrases of Kipling that are popular in our literature are as misleading as his line: "East is east and west is west, and never the twain shall meet." All the world is now so close to us that there is no part of it in which we cannot be interested and in which we do not have a responsibility or might have a responsibility in the kaleidoscopic change of world events.

New Places Come Forward Fast

Teaching the range of content of human geography helps students to understand the little known and explosive cores of human realities in important areas in the world where the United States is specially interested. During the few years that have elapsed since the end of World War II, we have seen the tragic,—perhaps one may say fatal, results of our ignorance of the outside world. Seven years ago we missed knowing that the situation in China would inevitably lead to Communism. We did not know enough about French Indo China to understand what was happening there. Iran was a name for which we had to search on a map. The way of living of the nomadic population of the Anglo-Egyptian Sudan is still just a fairy tale. Yet the United States had and still has a direct interest in every one of these countries. A study of the human geography of Yugoslavia helps us to understand how easy it was to have Communism imposed on the people there; how a mountain population living at a

bare subsistance level, with a background of cooperative associations, could submit to a system of state socialism.

The situation in India, in Japan, and in half a dozen other places in the world requires that our young people be trained to focus their attention on the human geographic situations behind present-world crises. The vast majority of young Americans who graduate from our schools and colleges have never got to know well a country and a civilization different from their own. Yet the study of human geography is a most effective means of developing in young people international understanding.

In International Business

A knowledge of human geography in the field of international business and world trade is essential to appreciate our economic relations with the rest of the world and the keen competition between nations. The remedy for the ills now besetting the trade of the free world, exploring the way for an increase in international trade in which all free world currencies would be interchangeable, recommending corrections in policy and legislation because of economic dislocations growing out of the war,—all demand a background of information about countries and peoples. An intellectual approach would suggest a policy of encouragement of diversification of the economies of the countries now heavily dependent upon a small number of products, and of the governments of those countries to pursue policies likely to attract foreign investors to participate in the work of diversification. The United States' Foreign Operations Administration alone has more than 1,700 Americans at work in sixty countries to help foreign peoples better their economic conditions and way of life. They are trying to bring American skills, methods and techniques to the people of other lands. American education and technical skill have become a major export item at an expense to our government of more than a hundred million dollars a year. This work has become an important factor in American foreign policy. Never before in world history has such an opportunity and challenge come to any nation.

For Good Citizenship

Instruction in world human geography is primarily to instil into the student the type of understanding needed by men and women who want to acquit themselves fully in the duties and responsibilities of American citizenship. Even in the training of nurses and of girls in home economics it contributes largely, for if we educate a mother we educate a family. In our type of democracy, high-school boys and girls will soon become active partners in the administration of their own country and in its policies towards their neighbors in the shrinking world. They will be called on to vote for proposals and policies and will have to form judgments on foreign policies on the basis of their knowledge of lands and peoples. They must know something of the ways of life in foreign lands—the human geographical aspects of remote parts of the world. Knowledge is the beginning of tolerance and tolerance the beginning of understanding.

Upon public education the security and well being of our Republic rest. American public schools have the responsibility of raising up a nation of men and women highly literate, accurately informed about their own coun-

try and other countries in the world, as well as being well trained in the processes of rational and critical thought. If the schools fail in this, then we may expect to see the collapse or defeat of democratic self-government through the sheer inability of the electorate to be intelligent about different people and to meet the complex problems of our international world.

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A Guide *to* Geographic Content *in the* Social Studies

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and

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In addition to his teaching, Dr. Hanna has found time to author or edit social studies textbooks, spelling textbooks, professional educational books and official publications of educational organizations. He is on the editorial board of *World Book Encyclopedia, Building America, Review of Educational Research, and Encyclopaedia Britannica Films.* He has been Director of Educational Division, U.S. Mutual Security Agency, Philippines, and served as an educational consultant to various government agencies. He has been active in the National Education Association and other professional organizations.—Editor

THE man-to-man relationships which dominates the activities of all human societies are constantly modified by the particular environment in which those activities take place. Conversely, whenever human habitation occurs, man makes persistent attempts to adapt, shape and utilize the natural environment to his own ends. In this he is aided by certain environmental opportunities which facilitate his efforts and hindered by other natural obstacles which must be overcome. However, as he advances in the realm of scientific discovery and learns to apply this knowledge through technology to the problems of living, he is gradually assuming greater power in shaping his environment to his will.

It has long been recognized that a knowledge of these important interrelationships between man and his natural environment is essential to citizenship competency, particularly in a complex, industrial society. And the responsibility falls on the school to provide instruction which leads to such competencies. During recent years, however, the school has come under increasing criticism for neglecting them. It is generally agreed that such instruction, leading as it should toward the development of important geographic concepts and ways of thinking and acting, has been seriously passed over.

It is commonly accepted that the United States has been thrust into an active leadership rôle in international relations. Accompanying this new rôle, there has been a general awakening among the American public concerning the significance of geographic knowledge and understandings to the successful conduct of this nation's international affairs. Despite this, a series of factors operating within education and within

geography during the past several years suggest that present geographic teaching and learning is far from satisfactory.

Research: The Key to a Revitalized Instructional Program in Geographic Education.

A revitalized instructional program in geographic education for the common school calls for research into all phases of geographic education—into content, methods, and materials of instruction. From the data of research studies, information may be obtained which will help to improve geographic instruction in the following areas:

1. The selection of appropriate content and efficient teaching methods in geography.
2. The preparation of instructional materials which are physiologically sound while remaining scholarly accurate.
3. The professional preparation of teachers—we must know more about the content and learning experiences appropriate to teacher education programs in geography before a great deal can be done for youngsters in classrooms.
4. The development of appropriate methods and materials for assessing and interpreting the results of instruction at all levels, from the primary through the collegiate instruction.

Recent Research Into the Geographic Content of the Social Studies Curriculum

A recent study was undertaken in the first of the areas outlined above—the selection of appropriate content for instruction in the geographic strand of the social studies curriculum. The broad purpose of the research was to obtain data which would suggest instructional objectives in geography for the elementary and secondary schools. It was recognized in this research that the educator must utilize the specialized knowledge and contributions of particular disciplines in developing curricula. To this end, recent publications in the discipline of human geography were examined for statements which would describe important interrelationships which exist between man and the natural environment.

From the literature of the professional geographer, statements were selected which might aid the educator in the process of selecting appropriate content in the geographic strand of the social studies curriculum of the school. Through a careful analysis of modern literature in human geography, more than 800 descriptions of the "living 'tether' by which man, earth, and society are irrevocably bound" were gathered. They comprise, therefore, geographic "content" for the social studies curriculum of the school.

Building a Definition of Man's Relationships With His Environment

The first step in the prosecution of the study was the identification of the nature of the interrelationships which exist between man and the natural environment. To this end, a definition of an interrelationship was built. According to the definition, a statement of an interrelationship describes some kind of interaction existing between man, on one hand, and the natural environment, on the other. Further, the statements in the present study were limited to those which were widely applicable over the earth. Specific local conditions were excluded in this definition, there-

fore, and only those statements which generalized an interrelationship between man and his environment over a broad area were included.

The study required that the definition of an interrelationship be consistently selective of the types of statements which were being sought. The investigator had to have a definition which would differentiate clearly from the varied writing styles and subject matter of the many authors, those statements which described an interrelationship between man and the natural environment of broad applicability over the world. The working definition of an interrelationship was developed in great detail, therefore, so that the analysis of the literature of human geography could proceed with a high degree of selectivity and consistency.

Selecting a Bibliography

After the detailed definition of an interrelationship, which appears in the report of the study, had been established, a bibliography was compiled of books and periodical literature which had been written in the field of human geography by professional geographers. This bibliography was limited to the period 1946-1953 in order that the more recent points of view and the new knowledge of the discipline of human geography might be incorporated in the study. All available works by persons identifiable as professional geographers which might include the type of statements being sought in the study were considered for inclusion in the bibliography. The publications of approximately 500 authors of several thousand articles appearing in the periodical literature and 200 authors of several hundred books canvassed during this early phase of the study. For these writings, a tentative bibliography was compiled. It consisted of: (1) 181 articles representing the work of 120 authors appearing in 92 different publications: (2) 65 books, the individual or collective work of 59 authors.

A careful analysis was made of each of the works included in the tentative bibliography. This resulted in the elimination of those articles and books not appropriate to the researcher's purposes. Eventually, 19 books and 42 articles were selected for intensive analysis of statements of interrelationships.

Gathering the Data of the Study

The final bibliography was then subjected to an intensive examination for statements of interrelationships as they had been defined in the study. As a statement in one of the sources was identified, it was recorded on a slip of paper. This procedure continued until all the references had been analyzed. Approximately 3,500 statements of interrelationships were selected in this manner.

When all of the books and articles had been analyzed, each statement recorded was subjected to a further examination to see that it actually met the definition of an interrelationship which had been established. This step was undertaken as a check against the original recording of the statement and to assure that the meaning of the statements remained clear when taken out of the context in which they originally appeared. Those statements which still satisfied the definition were retained. Approximately 3,000 statements remained after this phase of the study.

The investigator then brought together all statements which in whole or sub-

stantial part were comparable. As this was accomplished, summarizations were formulated representing the comparable statements of interrelationships derived from the analysis of the sources. In some instances, a representative statement was found among the comparable statements in the data drawn from the literature. In other cases this was not practicable, and the researcher drew up a statement which expressed the interrelationship common to all of the data which were comparable. Where possible throughout the study, the investigator attempted to let the data speak for themselves. Only when no appropriate statement from the original data existed did he interpolate and summarize in his own words the expressions of interrelationships of the authors of the works analyzed.

The Findings of the Study

The data yielded 824 discrete statements illustrating interrelationships between man and his environment. In order to present them in a logical fashion, they were organized within subdivisions of the seven major areas which delimited the scope of the interrelationships: (1) generalized interrelationships of man and his environment; (2) physiological interrelationships; (3) population interrelationships; (4) economic interrelationships; (5) political interrelationships; (6) social and cultural interrelationships; (7) military interrelationships. After analyzing each statement for the cause and result factors contained therein, a basis for classifying the statements within the subdivisions of the scope of the interrelationships was developed. The following list indicates the breadth of the statements which resulted from the study:

1. Interrelationships of Man and the Natural Environment
2. Physical Interrelationships
3. Population Interrelationships
4. Economic Interrelationships
5. Political Interrelationships
6. Social and Cultural Interrelationships
7. Military Interrelationships

The following examples taken at random from the body of the study are suggestive of the wide-ranging scope and importance of the geographic understanding which resulted from the investigation into man's interrelationships with his environment. Because each statement is essentially geographic while being oriented toward some phase of human relationships, the subject matter and the understandings contained therein are essentially social studies material as well. These examples assist, therefore, in describing for the reader the geographic content of the social studies curriculum.

> Soil misuse and its consequence, accelerated erosion, pose a serious problem to man everywhere.
>
> The development of mining on a large scale reflects the needs and demands of modern industrialism.
>
> Climate and weather play a dominant rôle in affecting the human habitability of a region.
>
> The extent and complexity of human activities in any settlement are reflected in the number and kind of transportation routes which converge upon it.
>
> Human health as well as plant and animal life is endangered when man's activities cause water supplies to become contaminated.

The amount and kind of food needed for health vary under different climatic conditions.

When methods of transportation are increased, improved, and made easier, there is a tendency for the things man consumes to become more numerous and varied and for the sources and markets for goods to become greater and more distant.

Areas of dense population provide the greatest opportunity to work for others.

The means of obtaining a livelihood, which is reflected in land use and industrial patterns, is related to the density of population in any area.

The sea and the character of its shore exert a marked influence upon the state.

A central location favors the expansion of political power, especially in the large plains area.

Aviation reduces the effectiveness of natural barriers as international boundaries.

The size and composition of a nation's population affects both national influence and security.

Some minerals are dissipated in use, but most metals are durable and therefore re-usable.

Natural earth features may impede or facilitate cultural spread, especially under the limitations of muscle-power technics.

Climate and soil affect the kinds of food which will be available for man's diet in a given area; hence the eating habits of the people of the earth vary.

As stated earlier, the study presents, under the seven appropriate categories, 824 such generalizations concerning the interrelationships of man and his natural environment.

Implications of the Study

The findings of this study contribute information useful in the following phases of geographic instruction in the school curriculum:

1. The findings provide guides for the selection of instructional objectives in the geographic strand of the social studies curriculum.
2. For the educator, this study implies an extensive array of appropriate learning experiences and evaluation items.
3. The study provides cues to the selection of appropriate instructional materials.
4. It contains organized geographic generalizations needed in the preparation of the teaching profession, both in pre-service and in-service teacher education programs.
5. It assists administrators and supervisors in guiding teachers to more effective instruction, and in public interpretation of the rôle of geography in the social studies program of the school.

Without a clear knowledge of the understandings which children and youth are to gain from the school instructional program, the teaching-learning process may be an enjoyable experience for all concerned, but it can hardly be assured to be a fruitful one. To have validity, school instruction must be undertaken with a specific goal in mind. Appropriate learning experiences occur when there is a clear understanding on the teacher's part of desirable learning outcomes. It is in this way that the instructional objectives which the

school holds are implemented through the school curriculum.

The findings of this study provide the educator with a broad range of classified statements which will assist in *setting* these *instructional objectives* in the geographic strand of the social studies. In addition, the findings are stated as low-level abstractions which suggest readily the broad range of experiences school-age youngsters may undertake in developing important geographic understandings and ways of thinking and acting. The reader will note that the examples drawn from the study imply many specific learning experiences youngsters might undertake in gaining important geographic understandings. The statements are not so abstract or general as to be all-inclusive, nor are they so specific that they have very limited application within the arena of human affairs. They represent a "middle ground" in which they have high utility both as statements of the objectives of geographic instruction in the social studies and as a fertile source for the development of appropriate learning experiences.

This study also provides data which can be used in the *evaluation of instruction* in the geographic strand of the social studies. Obviously, the tools and methods of evaluation must vary according to the maturity of the pupils and the objectives of the teacher. This study serves the teacher in the latter process by aiding him in the process of setting instructional objectives. In addition, the statements which comprise the findings of the study contain sufficient detail to provide assistance in evaluating how well youngsters understand man's interrelationships with the natural environment.

Adequate *professional preparation of the teacher* in human geography is essential if the geographic strand of the social studies curriculum is to be well taught. The key rôle of the teacher in the instructional program is widely asserted. Yet, most teachers have had little training in geography beyond their own elementary school years, and many of them had little then. Teachers must be better grounded in geography if they are to plan worthwhile educational experiences for youngsters. If we grant that young people should display a wide understanding of human geographic phenomena, then teachers must be more literate than we expect most of their pupils eventually will become. The present study, since it serves as a guide to the selection of instructional objectives in the geographic strand of the social studies, may therefore be of use in the selection of content in both pre-service and in-service teacher education programs.

The study should also be helpful in clarifying the *rôle of geography in the school program*. Confusion is widespread over the rôle of geography in the school curriculum. Much misunderstanding exists over the nature of modern human geography and the kind of instruction which is appropriate to this subject. This investigation provides the professional educator with specific information which may lead to a better understanding of human geography, the scope and content of its subject matter, as well as toward better interpretation to the public of its rôle in the modern social studies program.

Conclusion.

Geographic instruction in the school will not improve until a conscious effort

is made to substitute better practices for known weaknesses. Criticism alone will have little positive effect in improving geographic education. Criticism must be accompanied by constructive suggestions for improvement. Research data must be employed to assist in the selection of content, in the preparation of better instructional materials, in the training of a more adequately prepared teaching profession, and in the utilization of better methods of evaluating the effectiveness of instruction.

In the past, geography in the school curriculum has had a wealth of critical comments about the ineffectiveness of instruction but a dearth of research grounded suggestions for improving the situation. The American people want their children to demonstrate greater geographic competency than has ever been true to date. Research of the nature described in this article constitutes one possible approach to a serious problem which faces geographic education in the United States. It is with optimism that we note that further studies are underway. Geographic instruction has lagged behind almost everything else the school does. It is promising when both the educator and the geographer join forces to assure that this condition will not continue for long.

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Language *and* Geography

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JUST as all of man's activities and cultural institutions are shaped and influenced by his physical environment, so, too, is his language. It bears in its very morphology and vocabulary the imprint of climate, location and physiography. Conversely, by attentively examining a particular language, deductions can be made concerning the importance of weather, rivers or strategic position.

In this article several aspects of language have been selected for brief discussion, topics of particular interest to the geographer. No attempt has been made to treat these topics exhaustively; rather the purpose is to state the problem and to point in the direction of further study and research.

The Areal Distribution of Languages

Spatial analysis is one of the favorite techniques of the geographer. He studies the similarities of patterns and examines possible correlations of factors. A classic example is the similarity of patterns made by the areal distribution of climate, soil and native vegetation. The high correlation between these phenomena is a matter of common knowledge.

The Indo-European languages extend from Europe in a long narrow corridor across Asiatic Russia to the Pacific Ocean. This corridor approximately follows the 50th parallel, with North-South extensions along navigable rivers, coinciding on the climatic map with the boundaries between continental climate to the North and inhospitable desert and mountain climate to the South. It is also along this line that Whittlesey's world map of Major Transportation Routes has indicated a major avenue of transportation.

That there is a correlation between physiography, climate and language in shaping this pattern is confirmed by what we know from history: the long narrow corridor has been the principal route of penetration of peoples moving from Europe into Asia. This movement took place since Indo-European times (ca. 3000 B. C.), and is still taking place via the Trans-Siberian Railway.

A south-eastern extension of Indo-European languages, through Iran and Afghanistan, coincides much of the way with the extension of winter rainfall originating in the Mediterranean and reaching as far as the upper Ganges Valley. This route crosses the famous Khyber Pass into India.

On both sides of the Indo-European corridors are the less densely inhabited areas in which Ural-Altaic languages are spoken. While countries like Tibet, isolated by mountains and deserts, have tended to be removed from the mainstream of humanity, the northern plains

and lowlands of the Eurasian landmass, on the other hand, have facilitated the westward movement of Ural-Altaic speaking peoples, driven from the plains by the rigours of the extremes of continental climate. In Finland and Estonia these languages are known as Finno-Ugric, and in Hungary the Asiatic language is known as Magyar. These are the European remnants of movements that went as far as the Rhine River and beyond.

A negative correlation of great significance is presented by the dissimilarity of the political and language distribution on the continent of Africa. It is a graphic illustration of European conquest and the subsequent carving up of a continent without regard to populations or even physiographic features. The geometric political boundaries which cut across the major language groups to some extent explain the long period of colonial dependence and the difficulty of establishing politically stable self-governing units. The Anglo-Egyptian Sudan is an excellent case in point: with independence in the offing the Arabian speaking and oriented northern half of the country differs radically in matters of policy from the southern half inhabited by Sudanese Negroes speaking Sudanese dialects.

Thus language distribution maps, by their spatial analysis, shed further light upon historic events, illustrate the effects of physical features of the landscape and of climate, and contribute to an understanding of the political structure of continents.

Ethnographic Structure, Political States and Language

Language is an element of political geography. Most texts devote at least one chapter to this topic. The ethnographic structure of a political unit is often based upon a common language, although not synonomous with it. Austria and Germany are both German language states, but the two countries have a long history of political separation. India, on the other hand, presents an example of ethnographic structure based on different religions; it is also in this respect that ancient Israel differed politically from the neighboring Semitic speaking peoples.

Ethnic minorities within political states often cling to their separate and distinct language as the means of preserving their cohesion. Such ethnic minorities sometimes develop anti-national tendencies, as did the Sudeten Germans in Czechoslovakia. The last bid for autonomy within the Spanish state of the Basque and Catalonian minorities was crushed in the civil war of 1936. The revival of Gaelic in southern Ireland is designed to strengthen the forces which aim at complete independence of the island from England.

Not in all cases are ethnic minorities based on language differences anti-national in character. The Flemish and Walloons of Belgium are staunch nationalists, and in Switzerland the French, German and Rhaeto-Roman speaking people are above all Swiss.

The most stable European political boundaries separate chiefly on the basis of language, three ethnic groups: Romance speaking people in the west, Germanic people in the center, and Slavic speaking people in the East. The Romance and Germanic language areas meet in a bilingual zone comprising Belgium, Luxembourg, Saar, Alsace-Lorraine and Switzerland. The transitional zone between Germanic and Sla-

vic languages has been replaced,—after years marked by plebiscites, nationalist outbursts, "corridors," and wars,—by a definite line at the end of World War II. All Germanic speaking people were expelled from East of the Oder-Neisse line, i.e. from East Prussia, Pomerania, Posen, Silesia and Sudetenland. Along the Oder and the Neisse rivers political, ethnic and language boundaries coincide today.

Europe is not the only continent exhibiting ethnic structure based on language. There is the French speaking province of Quebec in Canada, and the many language islands in the United States, the Chinatowns and Little Italy's among others, which can be mapped. These "islands" usually represent ethnic minorities which are, however, fervent Americans clinging to the mother tongue because of strong attachment to the culture of the motherland. Not so in South America where Spanish speaking republics have large indigenous Indian populations. Such areas are often outside effective national control, and native Indian languages flourish. This is especially true of Brazil. Governmental control does not extend much beyond the means of communication and overland transportation.

The more than 200 languages spoken in the sub-continent of India to some extent explain the political particularism. India has rarely been unified except by foreign conquerors. Today English is the lingua franca and religion the basis of political organization.

To sum up: there is a high correlation between ethnic structure, based on common language, and political unity. Language as the expression of thought, and the store house of accumulated experience is perhaps the most potent force in unifying groups of people. Conversely, when other forces either unify or separate people regardless of language, then it is a measure of their effectiveness. Such other forces separated English speaking America from English speaking England, or Urdu speaking Pakistan from Urdu speaking Hindustan.

Language as a Measure of the Effect of Isolation

The geographer is interested in the location of regions, whether central, transitional or marginal, and the effects of such location.

Linguists have made the observation that the more people speak a given language the more rapid is its morphological change. At one extreme is Latin, a language no longer spoken, hence no longer subject to change; the Latin taught in our schools and colleges is the Latin of Caesar and Cicero. At the other extreme is English, a language spoken by hundreds of millions of people all over the world. English is in the process of constant and rapid change. Strong verbs are losing their time-honored past tenses by analogy with the ever more numerous growing weak verbs. The same process, somewhat slower, is true of German. Thus "hove" gave way to "heaved," and "dove" gave way to "dived"; while the German "frug" has been replaced by the weak "fragte" (asked). All this within the memory of the present generation — an unprecedented speed in the development of languages.

Pursuing this argument, then, small numbers of isolated people should speak languages which have undergone less rapid changes. And, indeed, this is so. The isolated fishermen of the coast of Labrador speak Elizabethan English,

still preserving the second person singular pronouns "thou" and "thee" in addressing each other. The Jews until recently isolated in the ghettoes of Europe, have preserved to this day a Middle High German dialect—Yiddish. The valleys of southeastern Switzerland, isolated by high mountains, are inhabited by people speaking Rhaeto-Roman, a language very close to ancient Latin.

According to the "Zones and Strata" theories of Griffith Taylor succeeding waves of migrations of people had, and still have, the tendency to drive previous indigenous populations into the more isolated and less accessible regions. Hence, one ought to find older forms and patterns of culture and speech in the marginal areas of the continents. This is confirmed by a study of the language maps of the world. We find Gaelic on the rainy west coast of Ireland, Welsh in the mountains of Wales, Breton on the rocky peninsular of Brittany, Indian in the interior of Amazonia, and Ainu (Paleo-Asiatic) in the hills of Hokkaido. In each case the comparative isolation of the region protects and preserves the isolated language. A linguist, knowing nothing of geography, coming upon the above mentioned languages, would know that somewhere in its history a factor, physical or political, had isolated the people speaking it. He could even ascertain the approximate time of the event by means of comparative linguistics.

Perhaps mention should be made of the effect of central location upon language. In addition to rapid change of older forms there should be some influence due to the proximity of other languages. Again, English is a good example of such location. Situated off the coast of Europe England has been exposed to the influence of all the languages spoken on the continent. Celtic, Anglo-Saxon, Latin, Danish, French and German—all became absorbed and integrated in the course of time. In many ways English is the most European of all languages, the result of location along the trade routes of the world, both ancient and modern.

The Importance of Language in Regional Studies

When the geographer studies a region he analyses all factors, physical and cultural, which have made it sufficiently homogenious and different from all other regions.

A knowledge of the language spoken in the region is indispensible to a true understanding of the cultural landscape. Not only is language the repository of the accumulated wisdom of a people, but its emotions and value attitudes are bound up in the very words and in the music of their pronunciation. The living language affords the careful observer insight into the psychology of the speaker. This is one of the important aims of the field investigations of a regional study in human geography. It requires direct contact with the population in the language of the area.

A "cheval" is not just a horse to the Frenchman—it recalls the feudal tradition of the "chevalier," the knight, whose castles still dot the landscape. To the American, on the other hand, the horse is the best friend of the cowboy, intimately tied up with his exploits and tradition, eating its flesh would be tantamount to cannibalism. The Frenchman sees nothing wrong in a good horse steak. The American prefers the meat of cows. Feeding hay to cows is one of his daily chores, but to the devout Hindu it

is equivalent of religious charity. Meanings can not be simply transferred by the tranlation of vocables, without taking into account the many connotations and transferred meanings, such as one gets from tone, delivery and context.

Much can be learned from the local dialect, the local pet phrases and peculiar idiom concerning the rôle and importance of concepts and events in the lives of the people. The word "Yankee" in the vocabulary of a Southerner has an altogether different meaning than the same word in the mouth of a New Englander. The name "Death Valley" for a stretch of desert in California speaks of the bad reputation this land had to the pioneers struggling to reach the West Coast.

A linguistic approach to the understanding of a bilingual area is especially fruitful in the tracing of customs and traditions to their origins by means of the very words which denote them, in the manner that we trace the knowledge and the word "Algebra" from the Arabs. This approach furnishes an excellent measure of the influence of one culture upon another. There are many bilingual areas in the world where such a study would be useful.

Etymology and Semantics as an Aid to Historical Geography

The geographer is interested in the origin of cultural elements and their subsequent diffusion. The present stage of linguistic science can make no definite statement in regard to origin and distribution of man himself, nor can it settle the old argument concerning the single versus the multiple origin of man. Nor is language a definitive clue to racial origin, although a good deal of confusion exists in this respect.

It is generally agreed that the Indo-European speaking people also called Aryans, spread out from the semi-arid regions north of the Black Sea about 5000 years ago, until they reached the Atlantic coast in the West, the Mediterranean in the South and India in the East. There is no evidence that these people had any particular homogenious racial structure. Their movement across the continents took hundreds, indeed thousands, of years, marked by conquests, intermarriage and settlement.

A modern analogy is the spread of English speaking people ever since the sixteenth century by means of conquest, intermarriage and settlement, until today Negroes, Indians, Chinese and Europeans speak English in widely separated areas of the earth. If one were to indicate on a world map the distribution of the English language, and then bury the map in a time capsule to be opened 5000 years hence, it would surely be a mistake for future geographers to regard this language distribution map as indicating the spread of the "English Race." What would be recorded, however, would be the spread of the influence of a powerful maritime nation, fortunately situated on an island near a populated continent. It would be a record of navigational advances, of colonization and expansion of trade spurred on by an industrial revolution—a record closely related to the history of England.

The hypothesis that Indo-European languages were spoken in their earliest form north of the Black Sea is based on comparative studies of cognates referring to such concepts as summer, winter, fall and spring, augmented by cognates of fauna and flora which flourish in temporate zones.

Semantics offer valuable clues to the

historical changes of such things as social scales and the values attached thereunto. Let us consider the change of meanings of the word "madame" in the course of time. Originally, the word symbolized the exalted mistress of a feudal manor. With the decay of feudalism and the shift of power to the "Fourth Estate," every housewife considered the title "madame" her natural due. However, the downward movement of that interesting word did not halt there, as today "madame" symbolizes the mistress of certain houses of ill repute, inhabited by "dames."

Jean Brunhes in his Human Geography of France devotes an entire chapter to the etymology of French place names, which he calls the "fossils of human geography." The names characterize the regions with respect to climate, physiography, flora, fauna and human occupance. A study of these names gives evidence of the rôle these places played in the affairs of Celts, Romans, Greeks, Vandals and Goths, all of whom left their mark upon the landscape in the form of settlements and names. The most ancient of such names are usually descriptive common nouns like mountains—Freiberg in Germany, Mons in Belgium—, places where rivers come together — Koblenz in Germany (from Latin: confluentes), or easy fordings of rivers—Frankfurt in Germany. Other names describe the coasts, naming dunes or bays or harbors. Still other names are derived from ruling families or from the predominant populations of a particular place. In the United States the innumerable Indian names of mountains, rivers and places attest to the occupance of the original inhabitants of this country and the rôle these places played in their lives.

In this bare outline of the rôle of language in the field of geography I have but hinted at the problems to be considered and the possibilities offered in the analysis of a region, of distribution patterns, of the cultural, political and historical relations among peoples.

Ordinarily, the geographer is not expected to be a linguist too, any more than he is expected to be a medical researcher or an archeologist. But one of the primary tasks of the geographer is to bring together relevant disciplines in order to shed more light upon integrated earth phenomena. In accordance with this concept modern geography recognizes such liasons as Medical Geography, Plant Geography, Transportation Geography, Marketing Geography, and a host of other combinations. Perhaps Language and Geography will receive more attention in the future; certainly, there is much room for further and intensive investigation.

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The Use *of* Literature *in* Teaching Geography

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OF ALL the fields of study, that of geography must surely be one of the most enjoyable, for by engaging in two of the pleasures of life, namely travel and the study of literature, much geographical information may be acquired. The value of literary descriptions lies largely in the vivid character of the picture which is presented. Many authors are able to paint a clear picture for, having seen and studied the places of which they write, they choose very carefully the words which they will use to convey to others the true character of the scenes which they know so well. Moreover, to children, the appeal of many literary accounts lies, not only in the vividness of their description of physical features, but in the way in which they show how people are influenced by these features.

Geography via Arm-Chair or through the "soles of your boots."

There are many different types of books which yield valuable geographical information. The purpose of this article is to indicate the wealth of geographical information which may be obtained from varied types of writings of literary merit and to suggest some ways in which those writings may be used in order to yield such information.

It is difficult to estimate how much geographical information has been gained initially from books of exploration and travel. Surely one of the best ways in which to learn what other parts of the world look like and what it would feel like to live in them is to read descriptions written by those who, with a "seeing eye," have travelled through them and to study the excellent illustrations which many of them contain. The significance of travel books in the study of geography was stressed by Professor Debenham in his Presidential address to the Geographical Association (Geography, No. 181. Vol. XXXVIII, Part 3, July 1953): "What a blessing to mankind is this almost universal urge to travel and an added delight is that it can be satisfied to some extent when done by proxy, with the aid of imagination. In fact, both at the beginning of life and at its later end, that form of travel—armchair travel—is the normal one, and a highly satisfactory form it

is. It is far more comfortable than real travel and can be just as exciting as your imagination likes to make it. I firmly believe that many geographers are born when, at the age of nine or thereabouts, they first curl up in an armchair with a story of travel." Although we would not want to encourage our pupils to be like those referred to by Elizabeth D'Oyley in her introduction to "Great Travel Stories of All Nations" who, "With their feet on the fender they can risk everything and challenge Fate from an armchair" to the exclusion of learning geography "through the soles of their boots," arm-chair travel is so readily available and so enjoyable that we would want to indicate the pleasures to be derived from it and also its value.

A Vast Amount of Material is at Hand

For almost all areas of the world a wealth of descriptive material is now available in travel books. For some areas, until comparatively recently, knowledge was almost limited to that which could be gained from descriptions written by early explorers. But even now, when attempting to convey to pupils a visualization of the characteristic features of the forest lands of central Africa, the descriptions of H. M. Stanley are of considerable use. Stanley indicated a very real understanding of what we are attempting to do in teaching geography when he stated in "In Darkest Africa": "Now let us look at this great forest, not for a scientific analysis of its woods and productions, but to get a real idea of what it is like." Part of the description of the forest of central Africa which follows has been selected to indicate the type of quotation which can be valuable to those who wish to help pupils to "get a real idea of what it is like":

"Imagine the whole of France and the Iberian Peninsular closely packed with trees varying from 20 to 180 feet high, whose crowns of foliage interlace and prevent any view of sky and sun, and each tree from a few inches to four feet in diameter. Then from tree to tree run cables from two inches to fifteen inches in diameter, up and down in loops and festoons, and W's and badly formed M's; fold them round the trees in great tight coils, until they have run up the entire height, like endless anacondas; let them flower and leaf luxuriantly, and mix up above with the foliage of the trees to hide the sun, then from the highest branches let fall the ends of the cables reaching near to the ground by hundreds with frayed extremities, for these represent the air roots of the Epiphytes; let slender cords hang down also in tassels with open threadwork at the ends. Work others through and through these as confusedly as possible, and pendent from branch to branch—with absolute disregard of material, and at every fork and on every horizontal branch plant cabbage-like lichens of the largest kind, and broad, spear-leaved plants—these would represent the elephant-eared plant—and orchids, and clusters of vegetable marvels, and a drapery of delicate ferns which abound. Now cover tree, branch, twig, and creepers with a thick moss like a green fur."

Many essayists have made considerable contributions to the formations of impressions of distant lands. In "Across the Plains" Robert Louis Stevenson describes the country between New York and San Francisco. How vividly he depicts the plains of Nebraska:

"We were at sea—there is no other adequate expression—on the plains of Nebraska . . . . . It was a world almost without a feature; an empty sky, an empty earth; front and back, the line of railway stretched from horizon to horizon, like a cue across a billiard-board; on either hand, the green plain ran till it touched the skirts of heaven."

His description of the Black Hills of

Wyoming, also in "Across the Plains," brings to mind the marked contrast between this area and the plains of Nebraska:

"Hour after hour it was the same unhomely and unkindly world about our onward path; tumbled boulders, cliffs that drearily imitate the shape of monuments and fortifications—how drearily, how tamely, none can tell who has not seen them; not a tree, not a patch of sward, not one shapely or commanding mountain form; sage-brush, eternal sage-brush; over all, the same weariful and gloomy colouring, grays warming into brown, grays darkening towards black; and for sole sign of life, here and there a few fleeing antelopes; here and there, but at incredible intervals, a creek running in a cañyon."

Other examples of vivid descriptions by Robert Louis Stevenson are those contained in his essay on Fontainebleau (depicting not only the forest, but the "wilderness of tumbled boulders" and the painters' colony), and in "Random Memories," descriptive of parts of Scotland.

To the geographer, an interesting collection of essays is that entitled "The Spirit of Place" included in "Essays of To-Day," selected by F. H. Pritchard. This collection includes such famous descriptions as Hilaire Belloc's of Delft, and Rupert Brooke's of Niagara Falls.

Novels can be of value, particularly because of the way in which they portray the influence of the geographical features of an area on the lives of the inhabitants, and of the picture which they paint of the way of life in an area. Many novels contain descriptive passages worthy of close study, e.g. Sir Walter Scott's description of the site of Edinburgh in "The Heart of Midlothian":

"If I were to choose a spot from which the rising or setting sun could be seen to the greatest possible advantage, it would be that wild path winding around the foot of the high belt of semicircular rocks called Salisbury Crags, and marking the verge of the steep descent which slopes down into the glen on the south-eastern side of the city of Edinburgh. The prospect, in its general outline, commands a close- built, high piled city, stretching itself out beneath in a form which, to a romantic imagination, may be supposed to represent that of a dragon; now a noble arm of the sea, with its rocks, isles, distant shores, and boundary of mountains; and now a fair and fertile champaign country, varied with hill, dale and rock, and skirted by the picturesque ridge of the Pentland Mountains."

Kipling is another author to whom geographers are greatly indebted; many passages which he has written merit close attention for their descriptive value, e.g. his passages in "Kim" about the Himalayas and his description of the landslip in the "Second Jungle Book." Mark Twain's description of the Mississippi River in "Huckleberry Finn" is another worthy of study. In addition to these few examples, the names of Thomas Hardy, John Steinbeck, Louis Bromfield, Zane Grey, Pearl Buck, Agnes Keith and Robert Standish, to mention only a few from a very long list, come to mind as authors who help the reader to formulate a picture of the personalities of the various parts of the world which form the settings for their novels.

Many writers have done valuable work in writing what might be described as documentary statements which play their part in preparing the teacher of geography for his work in the classroom. Because of the vivid picture which they present, the following, selected from a long list of similar types of books, merit note among literary works of value in teaching geography: David Lilienthal: T.V.A.; Louis Bromfield: Pleasant Val-

ley, Malabar Farm, Out of the Earth; Katherine Mayo: Mother India; Gerald Winfield: China: The Land and the People.

Poetry Can Also Do Much To Enrich The Teaching Of Geography.

The following have been selected from very many examples which might have been quoted:

Rudyard Kipling's: "The River's Tale," describes the Thames in Pre-Roman times.

Francis Brett Young's "Songs of the Three Rivers" describes the courses of the Severn, Teme and Avon Rivers.

T. S. Eliot in "The Lovesong of J. Alfred Prufrock" describes an English fog:

"The yellow fog that rubs its back upon the window-panes,
The yellow smoke that rubs its muzzle on the window-panes,
Licked its tongue into the corners of the evening,
Lingered upon the pools that stand in drains,
Let fall upon its back the soot that falls from chimneys,
Slipped by the terrace, made a sudden leap,
And seeing that it was a soft October night,
Curled once about the house, and fell asleep."

Geographers who are interested in using poetry will find in the Home Book of Verse and the Home Book of Modern Verse (selected and arranged by B. E. Stevenson) two sets of poems of particular interest. The poems in the set "The Changing Year" paint a picture of conditions as they exist in the various months of the year in selected parts of the world; for example, in "Home Thoughts," Odell Shepard portrays very vividly the Fall colours of New England, and in "Indian Summer" Emily Dickinson reveals very clearly the meaning of that term. Those poems entitled "Poems of Places" are valuable aids to description. Included among these are, for example, J. C. Squire's: "Approaching America" which describes the unique skyline of New York City, and Walt Whitman's description of New York in "Mannahatta."

Practical Geographic Use

There are different ways in which these varied types of literature may be used. They may provide motivation and valuable background for the information presented in geography lessons or, because of their accuracy and of the detail contained in them, may form useful sources of factual information. There are types of literature which form suitable reading material for the teacher and others from which pupils may profit. Many books contain paragraphs which may be read aloud to pupils or studied silently by them. In considering the use of literature, guidance may be found in Francis Bacon's statement: "Some books are to be tasted, others to be swallowed, and some few to be chewed and digested: that is some books are to be read only in parts: others to be read but not curiously; and some few to be read wholly and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others."

If literature is to be used effectively in the classroom, it is desirable that pupils should be active in its use, rather than read it in a passive manner. There are many ways in which this can be done. From descriptions of a journey a "road before you" map may be prepared, or, on a section across the country described, outstanding features may be noted. Pupils may be encouraged to make

a model or to draw a picture of what is described in words. Since many travel books, recently published, are well illustrated, a useful exercise might be the writing of descriptions based on the pictures in the book. For books which contain useful illustrations, the preparation of a set of questions to be answered from their study may be worthwhile. Novels may provide the basis for the preparation of a chart showing seasonal activities on a farm. A statement from literature may provide the starting point for a series of lessons by having pupils pursue their studies with the following questions in mind: What can be added to the statement made by the author? Does the author describe conditions as they now exist in that area? If not, what changes have occured?

The use of literature in teaching geography has been considered here, but it would also seem that geography can help to create an interest in literature by making apparent to pupils the fact that many descriptions which they will find in literature are of real places which actually exist on the earth's surface. If literature is to make a valuable contribution to the study of geography and, as R. N. Bowler suggests in "The Factor of Place in Literature" (Journal of Geography, Vol. LIV, No. 8, November, 1955), a knowledge of geography is essential for the understanding of literature, then obviously there should be some co-ordination between the work of the English and Geography teachers. It is largely upon the extent and efficacy of this co-operation that the possibility of making the fullest possible use of literature in school will depend.

The value of any aid depends upon the aims of teaching a particular subjects or subjects. Many would agree with Mackinder that children should be trained "to think visually with accuracy and with readiness" and with Fairgrieve that they should be trained to "imagine accurately." It is because of the way in which it helps pupils to "think visually" and to "imagine accurately" that literature, judiciously selected and discriminately used, merits a place among the aids available to the geography teacher. It is because, as Margaret Anderson has stated in her introduction to"Splendour of Earth": ". . . . no deadly accurate, purely technical description can bring vividly to life a mountain, a great river, or even a climate, can make it our own to love and remember, as an imaginative description by a great writer can do. . . . . We must have the technical descriptions: our mental picture without them would be as fluid and formless as honey without comb. But technicalities alone are comb without honey; we need imagery, ideas, beautiful words well used to give full enjoyment and appreciation." But the use of literature in teaching geography goes far deeper than that; has not the teacher of geography an excellent opportunity to further the fuller education of his pupils by helping to foster and to nourish their interest in the treasures hidden in books?

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It would seem desirable for each teacher interested in the use of literature in teaching geography to make his own personal collection of writings which he feels will be best suited to aid him. For this reason, the bibliography has been restricted to a few references of a general character which could assist in the compilation of an anthology to meet the teacher's individual needs and accord with his own aims in teaching geography and his own literary interests.

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Geography *in* American Literature

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GEO-GRAPHY, the description of the earth, has the real world for its outdoor laboratory; literature comes alive through the individual reader's imagination. Thus they appear to come from opposite poles. But the emotional experience provided by literature can aid greatly to stir the student's mind to receptiveness and to arouse his interest in the world around the people he reads about. Travelogues, explorers' narratives, regional monographs, no matter how great their literary value, are excluded from this discussion; nor is it intended to ascertain literary achievements by great scholars of geography. Purely informative writing is assumed not to appeal to the emotions. The idea is to help to clarify how the story, great or not so great, the "reading for fun" can be used in the teaching of geography and what problems arise when the narrative of human actions and emotions is linked more or less strongly to a geographic setting.

Prose literature by Americans about America will receive most of our attention although the conviction of the value of literature for geography teaching was derived from a modest perusal of European as well as of American writings. Some teachers of English may take a dim view of including geographic orientation in the discussion of heroes, plots, styles and other aspects of books, and some teachers of geography may consider excursions into fiction a useless diversion. Still, the stress, which modern education puts on the motivation of students, and the trend toward interdisciplinary cooperation make usage of literature in geography almost unavoidable.

Finally, the writer pleads for indulgence. She is a college teacher of geography, not of literature, and inclined to select books for the rare hours in the easy chair in about the following order: Professional articles outside the field of specialization, travelogues, non-fiction in related fields, and last, fiction. In fall 1955 such reading meant Paul Horgan's *Rio Grande,* Stewart Cloete's *African Giant,* Edmund Wilson's *Scrolls from the Dead Sea* with no time for the *Man in the Grey Flannel Suit* and the flat refusal to tackle anything like *Deer Park* after *Bonjours Tristesee* did nothing to brighten a morning of slow registration. It would be preferable to discuss books like Thor Heyderdahl's *Kontiki Expedition,* Sven Hedin's *Conquest of Tibet,* Leopold Alden's *Sand County Almanac,* Graham Hutton's *Midwest at Noon and* Rachel Carlson's *The Sea Around Us.* However, such books are

likely to be listed under complementary reading and are respectable among geographers just as nature books will find favor with teachers of natural sciences. Students refer to this type of book when they say that "the teacher made us read it." The following is not based on a critical or systematic selection but on a few of many chance discoveries of helpmates in the never ending labor to make young people realize the magnificance of the geographical theme.

Maps—The enjoyment of many a book would be enhanced if it had a map in it showing the places, even ficticious places, and their location relative to landmarks that are significant in the story. A good example is the map in *Tomorrow* by Philip Wylie without which an understanding of the events during the atomic attack on an imaginary midwestern city would be impossible. It is hard to train readers to curiosity about the WHERE of a story and to the habit of ascertaining its location when a book has no map, and an indexed atlas is not handy. The atlas has been far less forecefully impressed on the public as essential to homes where parents "want the best for their children" than the encyclopedia or English dictionary. Place name geography, comparable to spelling in English and dates in history, has lost favor in the educational pattern through the recognition that geography is more than locating rivers and towns on maps. Accordingly, lay critics of contemporary education complain that junior can't spell and count and "does not know where anything is either." Maybe he does not, but he would be better off to have acquired the habit and skill of locating places, that he hears about, in an atlas than just to have learned a number of places the selection of which could not be standardized even in the same school system.

Juvenile fiction often lacks maps; the splendid "Little House" series by Laura Ingalls Wilder does not have a single map in the well illustrated set of seven volumes. Many adult books also lack maps and some that have them might as well be without. The maps are often very sketchy, artistic rather than informative and preferably on the inside cover where catalogue labels and loan card pockets often make them useless. Examples of helpful maps in the wrong place are those in Kenneth Roberts' *Oliver Wiswell*, George Stewart's *Storm*, and Bernard De Voto's *Across the Wide Missouri*, while the latter's *Course of Empire* has the great benefit of maps by Erwin Raisz throughout the book and Alfred Bertram Guthrie's *The Way West* has three maps in the right place. If publishers let the geography teacher down, the authors rarely do: When the student returns a book with shining eyes and the assurance that he really liked that one, let us ask him if he would not like also to find out where *Robinson Crusoe's* island could be on the map, where David's perilous journeys took him in Robert Louis Stevenson's *Kidnapped* and—in higher grades—if it would not be interesting to find out more about the confluence of Ohio and Mississippi where KIM in Edna Ferber's *Showboat* was born or about Georgia's red soils of Tara in *Gone with the Wind* which are so red in the film too. Humans have a naive curiosity about the WHERE of places they hear and read about and the geography teacher can build on this curiosity.

Geographic Identity.—There is a difference between identified and defined locale. The location of a tree that grows

in Brooklyn is obviously identified and Packingtown in Upton Sinclair's *Jungle* is also identified as the Union Stockyards of Chicago. Small towns and sparsely settled counties are usually assured to be ficticious. Great cities and the states need and can not be. Large populations and great size assure anonymity and a considerable degree of independence from authors' and readers' opinions unless regionally identifiable scandals arouse national attention: Then Louisiana will take notice of Robert Penn Warren's *All the King's Men,* Chicago, of Upton Sinclair's *Jungle,* and California, of John Steinbeck's *Grapes of Wrath.* The stockyards of the windy city, the view of the Golden Gate, the Hudson and East River as well as Park Avenue and Broadway are in need of identification because each is unique and essential to Jurgis suffering, to a woman's devotion to San Francisco in Edna Kathryn Forbes' *Mama's Bank Account,* to the way of life of many people in Thomas Wolfe's *Time and River* and *You Can't Go Home Again* and of many characters from the stage, tin pan alley, the waterfront or Harlem. Such places are not reproducible anywhere else on earth. One might as well try not to identify Rome in a book about Julius Caesar.

Gopher Prairie is defined even if Sinclair Lewis later maintained that he meant Main Street everywhere. Thomas Wolfe's Altamont also is only defined even if everybody in Ashville, North Carolina, recognized his hometown. There are many towns with a main street and many towns with a railroad station, a square and a street car going up a hill. Still, Sauk Center and Ashville identified themselves. Identification of a defined locale is fascinating for people who live in it but it can also be a good exercise of observational powers. Let us then find geographical locations or places that fit descriptions in such books as Lois Lenski's regional stories for children, in M. K. Rawlings' superb regional portraits, and J. C. Harris' Remus collections.

Not even the producer of pulp novels can afford to get somebody murdered in the hotel of a palmtree resort and a car stalled in a blizzard a few blocks away. He can't have a strike in a steel mill in North Dakota, the boll weevil damage a cotton crop north of the Ohio or a steamboat whistle on the Colorado. Minor inconsistencies are allowed in stories with a defined locale but even they are frequently taken to task in the local paper of an identified location. Discussion of exaggerations, one-sideness and ommission of important details are fruitful in bringing to light the possible intentional distortion by the author and the significance or lack of it of certain landmarks for the lives of people. How important is the Empire Building, the Statue of Liberty, Idlewild and Lincoln Tunnel for New York or some New Yorkers? What is meant by a "college town?" How do traditional pictures portray New England, how does rural New England appear in a book of stark tragedy like Edith Wharton's *Ethan Frome,* what is meant by a New England, a "regional" novel?

Regionalism.—The idea to consult the regional novel has immediate appeal for the teacher of geography of North America. Some bibliographical references must serve here in lieu of another essay on the widely discussed regionalism in American literature, but some problems should be pointed out.

First, most regional novels are his-

torical in their approach. Anything that is to have the authenticity of actual experience and geographical reality must have happened and therefore evolves out of the past. Changes in America were rapid over a few decades and to fathom them fully many sources must be studied and much can be and is still available for helpful actual experience, for instance, the narrowness of winding streets, the musty smell of houses in ghost towns, the rustle of elegant gowns, the clang and clatter of outdated machines, the touch of smoothly worn tools. But the landscape—a biological phenomenon—with its original forest cover in Ohio or Indiana, with the buffalo and the tall grass on the prairie is no longer there for actual experience. The desire to check and capture as much as possible the geographic environment of historical events and peoples led scholars like Samuel Morison, Bernard De. Voto, Herbert E. Bolton and Wallace Stegner, among others, to their fieldwork through which they relived Columbus' voyage to America, the wanderings of fur trapping mountain men, Eusebio Kino's rides on muleback, and John W. Powell's Colorado expeditions respectively. This outdoor historical research represents a unique American contribution to the field of historical geography, which, in the old world, has different methodological aspects. The works of these scholars often have considerable emotional appeal through the suspense of actual events; they represent as much geography as history since they often deal with explorations of land rather than with psychological plots. Much of the f i c t i o n listed under regionalism in compilations of American literature is more rewarding for history than for geography, illustrated by Robert Kenneth, Oliver Wiswell and Walter Edmonds' *Drums Along the Mohawk*. If the region is seen through contemporary eyes, the geographic setting yields to preoccupation with social problems as in William Faulkner's southern novels and Ruth Suckow's drawn out midwestern narratives like *The Folks*.

Secondly, regionalism as such has no suspense or emotional appeal comparable to the tales of exploration, the climb of a mountain, or of canoe trips through a wilderness. "The sign of place is all the more acute and winning when it occurs, so far as we can tell without conscious effort to make that influence manifest" is a thought provoking sentence in *Regionalism in America*. It points to the weakness of veritism and its classic representative, Hamline Garland's *Son of the Middle Border*. This autobiographical regionalism lacks glowing emphasis, humor and drama and does not grip the imagination as Garland's short stories do in *Main Travelled Roads*, for instance, where human drama unrolls in front of geographic backgrounds. Restrained descriptions of wandering pioneer families and their gatherings to music in log cabins, of the toil of plowing and threshing, of the role of the railroad, the elevator, and the grange for marketing the grain combine into a sort of social history without the benefit of source identification and illustrations which often accompany publications in state historical quarterlies. Veritism is informative and tends to be more accurate than a provocative story, but then we might as well teach straight geography.

Third, the discussion of regionalism in America is much concerned with authors' ideas about its problems while the geographer is likely to be more interested

in the reality of regionalism which after all is originally a geographic concept and is a very lively topic in the field of geography too. Literary regionalism does not intrigue the geography teacher as a school of thought or a style or a period but as an opportunity to relive the experiences of men who met the challenge of a specific environment. Then literature can dramatize for the geography teacher that which he himself cannot do so excitingly without it: Human Geography.

Man and Earth.—If geography deals largely with man and earth in interaction and if educators are right when they prefer participation to indifference, then dramatization and individualization of man's use and abuse of a geographic environment should be valuable. Here is the truest geographical theme of fiction: It deals with the cold winter and blizzard on the plains, the drought and the dust, the rains and the floods, the forest fires and the storms. This theme has a geographically created suspense: Will these natural forces win out or will man have the brains, technical skill, perserverance and cooperative spirit to outlast, to tame them? Will nature's come-back be the last word after the buffalo are killed, the prairie grasses plowed up, the trees cut down, the streams polluted and the winds near the cities fouled or is there still time at the end of the book for man and earth to come to terms ecologically?

For the teaching of human geography it is less significant to discuss whether Ellen Glasgow's *Barren Ground* pertains to Virginia only or, maybe, to larger parts of the South than it is to emphasize the plot inherent in one woman's struggle to rehabilitate her fields which like the land of her neighbors were ruined by a monocrop system. It is human geography to follow in Ole E. Rolvaag's *Giants in the Earth* the struggle between a Norwegian immigrant woman's soul and the overpowering loneliness of the treeless prairie. It is tragedy for land and man when successive years of drought scorch the grain, starve the cattle and raise the dust of the plowed land in Conrad Richter's *Sea of Grass* and Feike Feikeman's *The Golden Bowl.* Here the suspense is based on one of mankind's oldest dramatic themes: the antagonism between herdsman and husbandman.

For an understanding of the interaction between man and earth it is also important to realize that people feel and act differently about resources at different periods and in different places. The pioneer's feelings about black cherry, walnut, maple and white oak in Indiana and Ohio as they are brought out in Conrad Richter's *The Trees* and *The Fields* are not our feelings. For an appreciation of the meaning of time and space distance it helps to follow the people who moved west and put the Mississippi "between home and the new future." The ugly aspects of frontier life,—whisky as the infallible means of barter, lack of help in illness, the distance to market, the ordeal of a winter with its fight for fuel on the treeless plains, the unutterable suffering of the beasts which were put into service for men, and the glory of seeing the forests give way, of hearing the first whistle after the tracks could be cleared, and of moving the products to town—all this is geography with the stamp of human suffering and joy.

Most American literature that has a powerful geographic setting deals—to repeat the disrespectful but pertinent

remark of a student—with "busting up the wilderness." This is not surprising. The frontier theme must be all prevailing in a civilization that saw the occupation of a continent by an new race in less than three hundred years. The frontier theme in its many regional and chronological variations has had a strong hold on American authors and readers and is not likely to run out very soon. But dramatizations of the struggle between man and the geographic environment without the frontier to sustain the suspense are beginning to appear.

A good story to suggest when the newspapers tell of Hazel, Connie, and Edna is Christopher La Farge's *The Sudden Guest* where a hurricane hits New England and an elderly lady of breeding, who knows that one should not tap a barometer when it begins to drop rapidly but has a hard time to understand how meaningless the conventional becomes in catastrophe. George Stewart's novels *Storm* and *Fire*—acclaimed by college students who were required to read them as "so good that they could not put them down"—are human geography par excellence: They are the drama between the causes and the path of a cyclone on the one side and an array of humans on the other, between the forest fire started by lightening and some heroic and some miserable humans fighting the holocaust. What happens to earth when man's controls go off is the theme behind George Stewart's *The Earth Abides*—a rather readable geographic example of "science fiction," a debatable and unfortunate term since science and fiction are basically contradictory. For suspense there is Walter Lord's *A Night to Remember* which is also suited to heighten interest in nature's icebergs and man's inadequate precautions on the Titanic. For beauty and simplicity one old man in a small boat and alone pitting his strength against the sea, Ernest Hemingway's masterpiece has no rival.

Among great themes of the geography with which Americans live and which invite exciting treatment in books that the future may bring are—among others: The shipping on the Great Lakes, the floods of 1952, the problems of social living in settlements that science created like Los Alamos, and man's conquest of continental distances as a flyer. There is as yet no great epic about the people who fly and service, design and finance American planes. But Guy Murchie's *Song of the Sky*, while non fiction, is very good reading for any high school senior or college freshman who dreams of wings and is not averse to a little science.

Finally, there is an American theme in human geography that is insignificant in European literature: The fate of wandering man who leaves the familiar environment and puts an ocean between the country of his roots and his new life, who works in a different climate and on different soil, among people of strange speech and customs. The immigrant novel with its wide range from crowded New York's jewry in Sholem Asch's *East River* to Nebraska's fields worked by old world peasants in Willa Cather's *My Antonia* helps young Americans to understand the ordeal implied in human migrations from one land to another.

Symbolism.—There is nothing wrong in fostering love and enthusiasm for one's own country just as it helps for international understanding to understand how other peoples feel about their lands. Nations often have geo-

graphic symbols: for instance, the English have their white cliffs of Dover, Russia has Mamutschka Volga and America has Ol Man River. The very personification of America's undescribably powerful river is the incomparable Huck created by the American who chose the Mississippi pilot's call for his *nom de plume*. It is good to read in a recent publication out of Red China about the reprinting of Chinese translations of "perennial favorites," among them *Treasure Island, Robinson Crusoe* and *Huckleberry Finn*. American's River flows with skiffs, rafts, the lovable nigger Jim and old Huck through every page of the book. No volume in the well-known river series dares to take up the whole length of the Father of Waters and it is doubtful that any treatment can reach Huckelberry Finn as the human expression of the Mississippi.

Only in literature do people speak as they do in life. Schoolbooks do not acquaint the student with the language of the people which is a living phenomenon and constantly fertilized by the living environment. In Walter D. Edmonds' *Rome Haul* the peddler who knows the Erie canal wants to call it the whole "shebang of life" and not a "water-level trade route," and Salomon Tinkle who wonders about the seventy locks in five miles calls them "stairways to the Erie" rather than "a link in transportation." The teacher explains the meandering river but the French patron in Guthrie's *Big Sky* says of the Missouri that "she never know where she run, here today and there to-morrow." The trappers, hunters, grazers and wheat-farmers of textbooks are mountain men, woodsies, stockmen and nesters in stories. The vernacular is still hitting it squarely with shanty-town, drive-in, loop and dead end, to name a few; what we teach as excess precipitation, high temperatures and tornadoes, the people call by what they feel these climatological items to mean for them: soaker, scorcher and twister.

Last not least, there are the poets, the masters of symbolism. If the teacher and students can stand a little verse why not savor Samuel Ward's "purple mountain majesties above the fruited plain" and read from an anthology of poetry? There are treasures like "The River" by Pare Lorentz, known through the film which his verses introduce, or Walt Whitman's "Pioneers! O Pioneers!" and Robert Fitzgerald's "Mementoes" where an overwhelming variety of American human geography is compressed into a few lines.

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The Problems *of* Reading Geography

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SKILLED guidance in reading geography helps a well developed program in reading. It is here that foundations can be laid for effective and intelligent reading. However, too often teachers fail to recognize the potentialities of such a program, and as a result, problems in reading develop.

Several factors contribute to these problems. First, there is a radical change in approach to reading occuring in the fourth grade. The emphasis shifts from an *extensive* reading devoted to *learning to read* to an *intensive* reading program concerned with *reading to learn.* Second, this intensive program requires a new work-type of reading. The story book suddenly changes into a text dealing with pictures, maps, globes, graphs, indices and statistics. All these must be read for a complete understanding of geography. Third, the reading ability of the class must be considered. It is not unusual for a range of three to five years in reading ability to occur in a normal classroom. Modern texts are carefully written on an easy reading level for a given grade. Under such conditions of varied reading abilities, all pupils cannot be expected to read fluently. On the other hand, a child may read a basic reader with ease but have difficulty in reading geography.

This points up the importance of the fourth factor contributing to the problem. Many geographic skills and abilities are needed for understanding geographic materials. Teachers are faced with training children in work-type materials and at the same time training them in geographic thinking. Both techniques have common puposes and skills, thus strengthening one another.

Effective reading of geography may be achieved by using laboratory or supervised study approach. Accepting this as proper, three broad areas may be considered. Reading skills establishing good study habits fall into three major categories:

1. Securing information
2. Organizing and interpreting information
3. Sharing and using information

SECURING INFORMATION

Comprehension and interpretation are major skills involved in understanding geographic materials. In turn, these are based upon a concept building pro-

cess. Sound teaching in this process makes the difference between word calling and comprehension on the part of the reader. It is a long bridge over the chasm separating the two, and many steps must be taken before a word caller learns to read real meaning into the text.

PREPARATION FOR READING

Teacher Preparation

It is well to consider for a moment readiness of the teacher for her role as guide through the maze of materials encountered in the study of geography.

Work-type reading is very effective in presenting a good learning situation. Its main objective is to establish sound study habits. The first responsibility of the teacher is to be familiar with all materials to be presented. The skillful teacher has a background of knowledge beyond the text. Folk tales, songs, dances, as well as factual material, add zest to any unit.

Planning a classroom as a laboratory for study facilitates the reading program in geography. There is much to be done in terms of materials of instruction. Files of pictures, film strips, necessary maps and globes, music recordings, text books on several grade levels, reference books and magazines should be readily available to both teacher and pupils. There should be a spot in the room where materials relating to the current unit may be brought together. Children enjoy browsing through materials, selecting material pertinent to the present unit of study.

Second, a teacher should understand her role in supervised study. She is a guide who studies *with* the class step by step to assure a thorough understanding of proper procedures on the part of the children. To establish a study pattern, the teacher should be aware of the need of repetition from day to day and from grade to grade before desirable study habits become a part of the child's thinking. Presenting a study pattern a few times and then allowing the class to work without guidance will not achieve worthwhile results.

Third, a teacher should realize the importance of readiness for reading on the part of pupils. Many difficulties often encountered in reading content materials can be avoided if proper attention is given to preparation.

Pupil Preparation

If children are to read geography efficiently, they must have a purpose for reading.There are several purposes for reading a text book:

1. The book may be used as a source of information to verify observations made in reading the landscape first hand.
2. The book may strengthen vicarious experiences already gained from the study of pictures or maps.
3. Books give further information not to be found in pictures or maps.
4. Books provide information coming from pictures, maps, graphs, statistics and textual materials which help to solve problems needing geographic interpretation.

All these purposes play important roles in supervised study.

In order to avoid reading problems, several steps may be taken. The purpose for reading must not only be clear to the child, but his interest and desire to read must be aroused.

Simply stated, the purpose for reading geography is to find information about the kinds of people, the kinds of

work, the kinds of lands and to find some reasons which help to explain why people live and work as they do in different parts of the world. Establishing this ability in geography thinking requires a great cluster of skills. Some of these are drawn from reading skills, while others are skills peculiar to the study of geography.

Further, children must be equipped with reading techniques which assure abilities to comprehend and interpret the printed page. Such skills include a vocabulary dealing with geographic terms. Attention should be given to training in the use of dictionaries. Another needed technique is the association of correct imagery and ideas with particular geographic terms. All are attained by careful guidance on the part of the teacher in using pictures, maps and clues from context to develop a vocabulary.

Direct observations in which a child may draw upon his own experience are ideal in establishing concepts. Too often this is not feasible, therefore, the teacher must resort to textbooks. Concept building in geography is based upon the ability of the textbook and the teacher to make both the people and the land upon which they live *real* to children. Pictures in textbooks should be of *real* people shown in *real* life situations. For it is upon such pictures and textbooks that teachers must rely in developing proper concepts when first hand observations are impossible.

Correct concepts in globe and map reading should not be overlooked. The language of globes and maps must be understood if they become effective as tools of learning. The first concern of the teacher should be in guiding pupils in reading meaning *into* the map or globe. They must *see* the ocean where the map is blue. Pictures are essential in teaching map symbols. For example, one teacher used an enlarged aerial map of the community and a map drawn approximately on the same scale as the picture. The lake, railroad, saw mill, highway, river and bridge were easily identified in the picture. Out of their own experiences children could visualize these and quickly find them in the picture. Transferring this imagery to the map symbols was a simple matter. True concepts of colors, lines and dots on maps are attained by the use of pictures. Children must be able to visualize the meaning of map symbols in order to read meaning into maps.

Having acquired the ability to read meaning *into* maps, the next concern of teacher and pupils is to read meaning *out* of maps. This important interpretation of map symbols enables children to visualize new areas.

Dot maps entail new map reading abilities for children at fifth grade level. Again, translating a dot into a meaningful concept depends upon the power of visualization. The dot must mean a certain number of people, cattle or thousands of board feet of marketable lumber, as the case may be.

Some understanding of a dot map may be had by allowing one dot to represent 10 children. In a classroom of 30 children, three dots would be needed to represent the children in the room. Carry this into total enrollment of 700 and the school would be represented by 70 dots. Soon, the class develops the concept that in dot maps, more dots mean more people, more cattle or more lumber. Much is taken on faith, for few children can visualize 500 people, 500 cattle or 500 thousand feet of lumber.

READING FROM THE BOOK

If a teacher is to establish purposes for reading, create interest and arouse a desire to read on the part of the children, she must set the stage with care. One teacher used the following procedure successfully:

A wise teacher catches the interest of the whole class when she takes inventory of *what* pupils know concerning the unit in question. To this previewing may be added observations from field trips, pictures and maps. The role of the teacher here is to guide the class into establishing the kinds of people, the kinds of work, the kinds of land and finding some reasons which help to explain man's activities in relation to his environment.

FRAMEWORK OF PROCEDURES

1. Observe	1. Field trip or "Indoor" field trip using one or more of the following: Pictures, maps, film strips, sound film
2. Inventory of known facts	2. Preview from pupils' experience
3. Classify and interpret	3. Tentative conclusions
4. Verify	4. Textbooks Source materials Resource persons Reference books Library books Magazines

This range of activities using a variety of materials offers an opportunity for caring for individual differences.

Often a local problem may be used as a spring board for a unit in geography. One fifth grade teacher used such an approach. For many years a large saw mill furnished the livelihood of many in the community. Notice was given that the mill would shut down within the year. Why, asked the children. Four weeks later, after much study, they had some understanding of the problems involved in their own community and the lumber industry in other parts of the United States.

It is surprising how much some children know about geography from actual experience. For example, this classroom had children who had lived in lumber-camps and milltowns scattered over the southeastern states.

Many questions arose during the discussion concerning why it was necessary to close the mill. One obvious observation was made. Most of the large trees of sawable lumber were gone. The mill now hauled logs from adjoining counties to the mill and soon this timber would be sawed out. Few new trees were growing because much of the cut over land was burned over. Many small trees were being cut for pulpwood and shipped to paper mills in the northern part of the state. A field trip was organized so that the class could see just what the conditions were. These trips were not a new thing to either teacher or pupil. Arrangements were made and the

class spent an afternoon in the field. Observations from the field trip were as follows:

1. Cut over, burned over land is subject to sheet erosion.
2. Tree farming helps hold the soil and furnish long range income.
3. There are varied uses of tree products.
4. Cattle raising often replaces lumbering.
5. Selective cutting furnishes pulpwood and saves some trees for future cutting.
6. Soil, forests and water are related.
7. Trees help conserve water supply.
8. Is the closing of the mill a local problem or is it common in the lumber industry?

These tentative statements and related questions for which no immediate answers were apparent were listed on the board. Having listed these at random as the questions arose, the next step in planning for teacher and pupils was the selection of observations and questions to be checked by reading. The teacher should guide pupils in organizing these in outline form.

It is well to determine the ability of pupils to locate information in a textbook. For example, suggestions from the class were made as to key words in tentative statements and questions to be circled for use of the index—such phrases as tree farming, lumbering in various areas of the United States. Clues from questions might suggest chapter titles to be found in the table of contents. For example, conservation of forests was found in a chapter concerned with Natural Resources. Often needed information can only be had from tables of statistics. Such questions were underscored. Questions calling for maps were indicated by a star. Thus, the textbook became a source of information to verify earlier observations. It also provided vicarious experiences available from pictures, maps, and textual materials.

Problems needing geographic interpretation are solved by assembling information gathered from the variety of materials found in textbooks. For example, the class found that the closing of the large mill was not a local problem. Although it was important to their local community, its closing followed the *cut out and get out* pattern which has occurred again and again in the lumber industry.

This alert teacher guided the reading by using thought provoking questions. She used pictures in the text to aid in interpretation of reading assignments, making sure pupils interpreted picture and text together. This sort of discussion assured correct imagery and ideas of geographic terms. For example, in attacking the statement, "Cut over, burned over land is subject to erosion," the teacher used three pictures in the text. One picture showed a virgin forest, another the results of land unprotected by proper vegetative cover, the third picture showed how strip farming rebuilds the land. After the pictures were studied, the text explaining the pictures was read.

WORK STUDY SKILLS

Three skills which should be strengthened by work-type reading are:

1. Skimming
2. Reading for detail
3. Reading directions for study

It is important to know when to read

rapidly, to know when to read carefully, and to know how to follow definite, precise directions of an assignment.

Skimming is a skill of many uses. Yet, too often, teachers fail to stress its importance. Using tables of content, indices, tables of statistics, finding main headings and sub-headings of paragraphs all require skill in skimming. A child cannot use textbooks in geography with any degree of success without acquiring this skill. He must read rapidly to locate information. Having found this information, he *reads for detail* to verify tentative statements the class agreed on earlier. For example, the statement, "Soil, forests and water are related," was verified by a chapter in a fifth grade science book. Some bright youngster remembered a picture he saw in the science book. Using the index, he quickly located the discussion of this phase of the study and asked for it as a special report.

MAN'S ACTIVITIES	NATURAL FEATURES
Oregon is leading lumber state	Largest and best forests grown on moist western slope of Cascade Mountains

Organizing and Interpreting Information

At this point teachers and pupils often run into trouble. The factor controlling correct interpretation of geographic material is the ability of teacher and pupil to see cause and effect relationships. For instruction in geography, this means the ability to see the relation between existing factors and conditions and the way of life of people in a given area. Such explanations are found in climate, topography, location, soils and other natural resources in relation to the nature of the people.

This is the focal point in reading ability in geography. The experienced teacher selects paragraphs showing such relationships and works through them with the class. This must be done over and over from grade to grade. As children advance from grade to grade seeing relationships become more involved, there should be much guidance on the part of the teacher before children can work independently using this technique.

On the board have two columns: One headed *Man's Activities,* the other headed *Natural Features.* As the class finds these items, list them in the proper column.

The third reading skill useful in study is reading for direction. Often children become lost in reading directions for use of maps, pictures or formal check on reading found in textbooks. Slow readers need help in this. The teacher should be sure the class understands precise direction and lesson assignments. Much of this misunderstanding can be avoided if children join the teacher in planning how the work will be done.

Another factor in the reading assignments takes into account the wide range of reading ability in a given classroom. Provision should be made for the children who read independently as well as for slow readers.

Independent readers may prepare an extra report from supplementary materials, while slow readers need guidance in dealing with the textbook assignment. For example, four pupils having read-

ing ability of ninth grade were assigned a chapter entitled, "Using Florida's Land for Forests." This is written for junior high level. These students formed a committee to present a panel discussion based upon this chapter. On the other hand, three slow readers were assigned a chapter, "Using the Forest Lands Today," in a fourth grade text. This chapter followed closely the experience one boy had in a visit to Oregon. One should never discount the contribution slow readers can give in discussion. Often they have had experiences and a more mature background than the average classmate.

USING STUDY AIDS

Teacher-pupil planning places certain responsibilities upon both teacher and pupil. First, there must be agreement as to the form in which the study result will be presented. Second, there should be agreement as to the time required to complete the assignment. There should be an evaluation period at the halfway point in the time allotted for the unit. This is important to the teacher as a check on those children having difficulties in various phases of work. Third, pupils should understand their own responsibilities for extra reports or similar work they assume.

This clever teacher worked out with the class a work sheet to serve as a guide in study. She saw that both superior and slow readers were accounted for on the sheet.

SUGGESTED PLAN FOR GUIDE SHEET

1. Vocabulary helps. Identify the following by matching:

Words and geographic terms	Definitions
1.....	( ).....
2.....	( ).....
3.....	( ).....
etc.	etc.

2. Guide questions for reading (taken from preview and tentative statements)
3. Map questions (assigned from study aids in text)
4. Relationship outline (assign certain paragraphs from text to be outlined under the following headings)

MAN'S ACTIVITIES

NATURAL FEATURES

5. Make bar graph representing the following table of statistics. (Teacher should give table)
6. Reading supplementary material, taking notes and preparing report to present before class.
7. Problem solving (report may be oral or written)
   Gather together information from pictures, maps, verbal material, and other sources to find some reasons which help explain man's activities in relation to his environment.

This worksheet offers guidance to both slow and independent readers. Slow readers will work through only the first few parts while the superior reader has a challenge in the remaining parts. As the class works, the teacher has an opportunity to help children solve their individual reading problems. The sheets require careful preparation on the part of teachers, but results are rewarding.

Sharing and Using Information

There are various ways in which a

class may share and use information gained from reading geography. Some of these are:

1. Verify the tentative statements and conclusions and answer questions which grew out of the preview discusion.
2. Written assignments taken from exercises in textbook.
3. Oral reports of special reading assignments.
4. As a class, select facts pertinent to the problem and make a summary statement.

Some time should be given to evaluating and new planning. A class should be able to see its strength and weakness. For instance, a class handles map questions very well but finds there are shortcomings in seeing relationships. In planning further study, the first consideration of both teacher and pupils should be re-teaching this phase of study.

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Geography *by* Television

By MARGARET McKEE

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HOW DOES one prepare a geography lesson for television? What type of lesson can be successfully broadcast? How many pupils may be used on the program? Questions such as these become the concern of teachers who are asked to prepare a series of geography programs for television. In a recent meeting of the Geography Club of Western Pennsylvania, a panel of members, because of their experience in television teaching on the Community Educational Station, W.Q.E.D., Pittsburgh, Pennsylvania, attempted to answer such questions.

Consideration of programs

From April 1954, when the Educational Television Station W.Q.E.D. became a reality, direct-teaching programs in the field of geography have been a matter of experimentation. Realizing that television, as an instructional aid, has unlimited possibilities, the In-School Program Committee has considered many types of programs.

In the first series of televised geography lessons, as in other subject areas, a different teacher presented a program each week. Each program had a different purpose. Some programs aimed to demonstrate teaching procedures, while others attempted to enrich and supplement the classroom teachers' work. It was soon learned that a "one stand" presentation was not effective. The programs lacked continuity and the teacher frequently shy of the medium as a teaching device, often did not present the lesson as well as had been planned.

Improvement of programs

Consideration of suggestions for improvement brought about the single-teacher plan which has been in use since September 1954. Under this plan one teacher plans, prepares, and presents a series of eight direct-teaching programs. Several values are apparent in this arrangement. The television teacher has an opportunity to perfect his television technique and to become acquainted with the medium as well as with station personnel producing the program. The selection of subject matter for the series, plans for each lesson, outlines for effective use of the televised programs by the viewing audience, and the writing of the script are the responsibility of the single teacher; however, visitors are often invited to participate in the lesson.

Good teaching by means of television requires the same kind of careful planning as good teaching in the classroom. Effective programs are the result of specific plans, well selected visuals, and careful attention to details as they pertain to the lesson. The following outline developed by a member of the Geogra-

phy Club Linnie B. James, who presented a series of geography lessons, points out essential steps to be considered in preparing to teach by television.

I Type of Lesson

1. The television studio is not a classroom. It is necessary to consider how the lesson can be adapted to television.

2. Facts to remember; (1) There is no color in anything shown; (2) the size of the set is limited; (3) visual aids must be limited in shape and size, i.e., a large map is not visible as in a classroom; and (4) the lesson must not require too much moving about.

II Purpose

1. Determination of purpose is essential. No program is of value that does not reveal a definite purpose.

III Subject Matter

1. The selection of the topic or subject to be developed requires careful thought. The teacher must plan in terms of subject material that would supplement and enrich the work of the regular classroom teacher. Enrichment may consist of; (1) visuals from a foreign country; (2) human interest stories about a country; (3) a new method of presenting material; (4) interesting personalities from other countries or from parts of our own America.

IV Plan of Lesson

1. Write out objectives. Determine geographic relationships to be taught. Plan for experiences that the pupils might not otherwise have.

2. Method

Decide the best way to attain the objectives by considering, (1) age of pupils for whom the lesson is planned. (2)the kind of audience participation you expect; (3) the activity for audience participation; and (4) the form the lesson should take.

3. Format of Lesson

1. Fit the television lesson into the format of a good classroom lesson i.e., (1) introduction, (2) development, (3) summary; (4) application or testing.

4. Script

1. Write out what you intend to say. Leave nothing to chance. A complete script will help you to think logically and sequentially. It will aid in timing the lesson in terms of the material, visuals, and activities.

2. Be familiar with the script. Remember it is the guide for the director. *Do Not* memorize the script but be sure to have the details well in mind.

V Selection of Visuals

1. Plan, collect, or make visual aids. Know what visual material can be shown. Good visual material is effective and important. It must be simple; it must catch the eye and hold the viewer's attention; and it must be easily handled.

2. Every visual aid must contribute to an understanding of the objective of the lesson.

VI Extra Material

1. Plan extra material to use in case the lesson develops faster than planned. It is good "insurance" to fill the time which may still be yours on the program.

VII Opening and Closing

1. Memorize the opening and closing thirty seconds. There will be no stumbling for thoughts if you have learned the opening and closing sentences.

HELPING THE CLASSROOM TEACHER USE THE PROGRAM

The effective use of a televised lesson in geography, as in any subject, requires a knowledge of the planned programs by the classroom teacher. Each geography series planned for direct-teaching is announced with the programs in other curriculum areas in a study guide. This guide is prepared to incorporate the in-school teaching programs into the classroom teacher's daily plans. It contains the titles of programs, a brief description of each, suggested activities and bibliographies to be used by the class before and after the telecast. An example of help for the classroom teacher is the following guide for one lesson prepared by Virginia Morrison of Kilkinsburg School, Pennsylvania.

HOW DO YOU DO! GEOGRAPHY

Grades 4, 5, 6
Teacher: Virginia Morrison
Turner School, Wilkinsburg

A child's curiosity is whetted as he journeys around the earth by the way of a geography book. A yearning grows within him to experience the things he has read. It is hard for a child to realize that people are real whose way of life and environment is so different from his own.

These programs are planned to help the child bridge the gap between the printed page and reality. It is, also, the aim of these programs to help strengthen the child's understanding of man's dependence on his natural environment to provide food, clothing, shelter and transportation. With a better understanding the pupil should grow in tolerance and appreciation of other people.

Week of October 3—People of Hot, Wet Lands

I. Before the Program

A. Have a simple globe available for observation.

B. Collect and display on the bulletin board pictures of people, homes, foods, animals, plants, and jungles of equatorial rain forest areas of Africa and South America.

II. During the Program

A. Introduction of guest from a tropical land.

B. Explanation of why this part of the earth is a "hot, wet, land."

C. Summarize the relationship of the natives' adjustment to their natural environment.

D. Discuss with the native some of the folklore of his land, songs, games, etc.

III. After the Program

A. Locate again on the classroom globe the hot, wet areas on the earth.

B. Review the ways the people secure clothes, food, shelter and transportation.

C. Use these new vocabulary words hot, wet lands, globe, equator, jungle, tropical rain forest, rapids, overhead sun, Africa, continent.

CONCLUSION

From the experiences of teachers of geography who have participated in television in-school programs the following points are considered essential in planning programs

1. Television has limitless possibilities as a teaching aid. However, as definite as its limitations may be, the teacher must adjust classroom methods to the television studio and the camera.

2. Television teaching requires expert performance. The resourceful tea-

cher plans well in advance and makes sure that the subject can be adapted to television. The geography teacher must know what geographic concept and relationship can be developed successfully.

3. Accuracy of fact and clearness of expresion are essential for understanding by the viewing audience. Programs should provide relevant and important information.

4. Teaching is geared directly to the objectives of the lesson. The method, questions, and activities are directed toward understanding of the purpose of the program.

5. Each lesson should provide for resource persons or resource materials for subject enrichment. Care must be taken to avoid paralleling the work of the regular classroom. Pupils should have enriching experiences which they would not have otherwise except by television.

6. The single-teacher plan has advantages over a staged studio classroom plan. Pupils may be used in limited numbers if their presence aids the teacher in presenting the televised lesson.

7. To teach by television is very challenging. It requires alert resourceful persons who are willing to devote time and effort to program development.

Field Trips *in the* Elementary School

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THOUGH it was a mild autumn day, the seventh graders came to school warmly dressed. The boys wore caps with ear muffs; the girls had scarves tied over their heads. As a result of their pre-planning the children knew that their trip along the harbor would be a windy one. They came prepared for comfort as well as for instruction.

Values of a field trip. A field trip is worthwhile if it is taken for a specific purpose. The children get first-hand experiences with their own environment. They gain information that they cannot secure from textbooks. Thus the field trip supplements the classroom work. If the trip is taken during or at the completion of a local unit, they gain a better appreciation and understanding of the home area. The preparation for the field trip encourages teacher-pupil planning and greater pupil participation in the activities involved. There is also something about a group traveling together that fosters a democratic atmosphere. The children also become close observers and begin to see more meaning in commonplace items of the environment.

Field trips need not involve great distance. Many things a teacher wants to demonstrate or call to the attention of the class often are near at hand. In studying land formations a third grade may go to the playground after a rainstorm and see how gullies are formed, how streams and their tributaries are started. They may see small waterfalls, rapids and other items.

The teacher may find that there are factories and other places such as bakeries within walking distance of the school. The age of the children and the curriculum determine which ones are worth visiting at any specific time. Food processing plants, mills, stores, farms, the zoo, museum, postoffice, etc. are other possibilities.

Planning. Careful pre-planning by the teacher will help to insure a successful trip. The teacher should take the trip alone ahead of time, in order to be certain that the trip is worthwhile, and also to know how to prepare the class to get the most out of the trip. If the trip is to a bakery, dairy, or factory, the teacher should give the host group some background information concerning the children, such as: numbers of

children, average age, the approximate time the children can visit without fatigue. The teacher should also ask if guides are provided, if the class should visit as a unit or be divided into groups, and if certain people could be interviewed should the class so desire. During the teacher's visit, there will also be an opportunity to set a day and time for the class visit that is convenient to the hosts as well as the school. The host group needs to know the number of children and adults making the trip. Although some of these suggestions seem minor and detailed, they will help make the trip a successful, enjoyable and instructive one.

Arrangements should next be made with the school officials for permission to take the field trip. The office should know when you plan to leave, to return, and the exact route you will take to get there and back. Each child must take home a permission slip for his parent to sign. In case permission is not granted by parents, arrangements can be made for that child to stay with another class while the trip is in progress.

It is advisable to invite some parents to join the trip. Not only will it aid the teacher to have several adults supervising with her (one adult per ten children is a good ratio) but it will also give parents a better understanding of the purpose and value of the field trip.

It is best for the teacher to decide how the trip might be made—by walking, by parent drivers, by school bus, or by public conveyance. If the trip is some distance from school, the teacher should make a map of the route for each child, noting points of interest for the children to observe while enroute. If the ride is to be a long one, a road map or a simplified duplicated map could be followed by the children. If it is worthwhile and possible, a different route should be chosen for the return trip.

Planning by the children is important to the success of the trip. Children should understand the reasons and necessity for undertaking this trip. The reasons for taking this particular field trip could be listed on the board or on a chart in the form of questions the children desire to have answered as a result of the trip. The questions could be duplicated or copied and carried along on the trip to help them remember the things to be studied. If the class decided that it would be necessary to interview some person during the trip a child or committee might be selected for this duty. They would then have time to formulate the questions they wish to ask at the interview. Sometimes it is profitable to have the interviewers practice by play-acting the interview with some other members of the class pretending to be the host group.

It will add to the value of the trip if the children know the order of the things they will see and if they understand any new or technical words the guide might use.

A standard of behavior to be expected of each child should be set by the class before taking the trip.

Upon arrival at the designated place remind the children to look for the answers to their questions. At the close of the trip ask for any questions. The guide or official in charge might be of great help during the question period. When ready to return to school, both the adults and children should thank the hosts for their kindness in making the trip possible.

As soon as possible after returning

from the field trip, it should be discussed and evaluated. Have the children check to see how many of their questions were answered. Evaluate the worthwhileness of the trip. The behavior of the group should also be evaluated at this time.

There are many follow-up activities for any field trip. A letter of thanks needs to be sent to the hosts and to any parents who may have driven the children. Reports from committees with any special responsibilities will be necessary. Children like to illustrate some of the things they saw, others will write poems of songs about the trip. Still others will desire to do further research due to a new or expanding interest that resulted from the trip. Children often use dramatic play as a means of expressing what they saw and learned while on the trip. Stories can be expected as an outgrowth of a trip. If anyone took pictures during the trip, children might make copies from negatives by using a floodlight and vellite paper. The writer has used this procedure with children as young as first grade. Many times the follow-up activities of a trip will lead directly into a new unit of study.

Not only do children learn facts and gather information on a field trip, they also gain in the understandings and attitudes that affect their relationships with others. The field trip is one way of helping to realize the educational objectives of the schools.

BOOK REVIEWS

DEVELOPMENT PSYCHOLOGY. By Louis P. Thorpe and Wendell W. Cruze. N. Y. Ronald Press. 1956. $6.00.

The psychology of human growth and development is immeasurably the richer by the appearance of this comprehensive and effective text. Using a broad and eclectic approach, the volume emphasizes personal and social adjustment of the individual at the varying levels of development. Especially fine is the review of recent findings and interpretations of physical, intellectual, emotional, moral, and social growth. Much attention is given to the environmental influences of home, school, and community. Especially strong, too, is the section on interests, attitudes, and social activities.—W. P. S.

THE COURSE OF AMERICAN DEMOCRATIC THOUGHT. By Ralph Henry Gabriel. N. Y. The Ronald Press. 1956. $6.00.

This is the second edition of a volume that can conservatively be styled, "an intellectual history of the United States since 1815." In this age when every ideal of the free, democratic world is being challenged, Americans should be especially alert and informed on the development and course of thought that has led to the concepts of democracy and freedom. Ralph Henry Gabriel, Sterling Professor of History at New Haven, has very carefully traced the path of American intellectual activity from the very beginning to the present and he adroitly points out the climate of opinion for the various periods in our history.—W. P. S.

Land Use *in* Southwestern Nebraska

Unit for Grade 8

By LULU ELLER
Stratton, Nebraska

THIS unit is a study of land use in an area including the counties of Hitchcock, Dundy, Hayes, Red Willow, Furnas, Gosper, and Frontier, and parts of Chase and Lincoln.

Objectives: To emphasize

1. crops best suited to land forms
2. crops best adapted to kind of soil
3. effects of climate on crop choice
4. rainfall essential for different crops
5. importance of conserving soil and moisture

References:

1. Bulletins from the U. S. Department of Agriculture: AIB No. 81, AIB No. 67, AIB No. 95, PA-128, PA-86, Miscellaneous Publication No. 95, PA-128, PA-86, Miscellaneous Publication No. 596, and Farmers' Bulletin 2035.
2. Geography of Nebraska syllabus for Extension course, Geography 163x
3. Collection of pictures of different land forms and their crops or other land use
4. Individual farmers

Activities and experiences:

1. Field trip to farm fields to observe land forms, crops, erosion, drainage, methods of farming which aid in soil and water conservation.
2. Experiments: Take samples of soil from old fence row, from cultivated field, and from pasture. Place each in a jar, and shake fifty times. Note how fertile soil has kept its shape and remained porous. Perform experiments determining water-holding capacity and mobility, too.
3. Activities are suggested in "Soil Conservation Activities for Children."

I. Topography: Republican Valley, plains areas, canyons

1. Definition
2. Region: Nebraska Loess Plain (small area in Sandhills)
3. Land forms: crops planted on different land forms, e.g., wheat on level or nearly level land; corn on sloping fields; rough and hilly land in forest, shrubs, and grass. Forest and shrubs in corner of fields, along roads, or as dividing line between farms useful as wild life refuge.

II. Soils: Holdrege (a Chernozem), Keith (Chestnut) are the loessal farming soils. Colby is similar to Keith but thinner and found on steep slopes. Dunesand is found, but it is mantlerock, not a soil.

1. Crop adaptation to soil, e.g., corn requires more fertile soil than wheat; rye will thrive in sandier soil than either corn or wheat; and sorghums extract more plant nutrients than either corn or wheat.
2. Methods of maintaining or increasing soil fertility. Emphasize nutritive value of foods is directly proportional to amount of available plant nutrients

in soils. High fertility favors high production.

3. Methods of soil conservation, such as contour tillage, terracing, construction of large dams and of farm ponds.

III. Climate: Cyclonic Continental Semiarid with hot summers and cold winters and 18-22 inches of rainfall.

.1 Temperatures, summer and winter

2. Growing season in days and relation to crops e.g., crop requires about five months to mature while winter wheat will ripen in from sixty to ninety days from the time it begins to grow again in the spring.

3. Amount of sunshine

4. Precipitation and relation to the typical crops of wheat, corn, alfalfa, milo, and cane

5. Need for irrigation increased by dry years. Stabilizes farm economy.

IV. Drainage: In Republican Valley (part of the Missouri River Basin)

1. Extent of watershed in Nebraska (13 per cent of state's area)

2 Main tributaries and the source of each

3. Characteristics
   a. dendritic spacing of tributaries
   b. canyon topography in tributary valleys
   c. wide shallow parent valley

4. Watershed
   a. definition
   b. importance
   c. how to keep watershed healthy

5. System of flood control dams: Trenton, Medicine Creek, and others projected. Water from dams will be used for irrigation

. Why the river is dry in summer and effect on its use

V. Summary and Questions:

1. What land forms are suitable for alfalfa? sugar beets? wheat? corn? pasture? forest? woodland? for only small brush, small trees and wildlife?

2. Do you enjoy planting seeds and watching plants grow?

3. How do we keep the soil in good condition?

4. If we keep the soil in good condition so it absorbs all the rain and moisture, is there any danger of our wells going dry?

5. In making a home for wildlife, what land would you use? What plants or shrubs would you plant?

6. Do you think it is worth while to conserve wildlife? If so, why?

7. Are there any trees on your farm, but not part of the farmstead ,which shelter birds and animals?

8. How does climate affect the growth of crops?

9. What river drains southwestern Nebraska?

10. How does one keep a watershed in good condition?

11. Why is it important to us to make good use of our land? How is it important to posterity?

12. Follow up activities which could be used:
   a. Make a scrap book or posters of pictures collected.
   b. Discuss the topics.
   c. Make a list of most important facts of land use in Southwestern Nebraska.

Geography *as a* Career

By MARION F. MURPHY

Geography Writer and Research Worker
Princeton, Massachusetts

Mrs. Murphy has done part-time teaching at The Pennsylvania State University where she gave courses in Elements of Geography, Geography of North America, Geography of Pennsylvania and Political Geography as well as handling correspondence courses in these subjects for a number of years. She was co-author with her husband of *Pennsylvania: A Regional Geography*, a college text and *Pennsylvania Landscapes: A Geography of the Commonwealth*, a high school text. In 1950 with Stephen B. Jones she wrote another high school text, *Geography and World Affairs* published by Rand McNally and Company and revised in 1956.—Editor

SINCE geography in one guise or another is slowly but surely finding a stronger place in the curricula of our secondary schools, teachers are more and more likely to find themselves confronted by bright-eyed youngsters who want to know how one becomes a geographer and what a geographer does. Unfortunately, it is a sad fact that professional geography remains largely a land unknown as far as most folks are concerned. There is much less general knowledge about what a geographer does than there is about the duties of a chemist or a physicist, for example. Geography is taught in primary and secondary schools, of course, and informed persons know that geography is also taught in many colleges and universities: that in fact some people must earn their living by this teaching. But what else? Does geography have a practical side? What skills and aptitudes does a geographer need?

What Makes a Geographer?

Perhaps the most fundamental question a child might ask himself is what qualities does a person need to become a geographer? Unfortunately, no really adequate tests have been devised to measure geographic aptitudes and it is extremely doubtful that any will be. This is partly because geography covers so much territory and displays such different aspects that many different skills and aptitudes are useful. But a few guide posts may prove helpful. Maps are the essence of geography and are essential to almost every branch of the subject. No one who cannot understand maps or who has no real feeling for them should ever attempt to be a geographer. It must be admitted, however, that some schools have not presented maps properly to their pupils and that there are individual cases where this deficiency might be corrected. On the whole, though, a youngster who has reached the secondary school level without acquiring a love of maps will not find geography appealing.

What other skills and aptitudes are necessary? What about mathematics, a flare for the social sciences, a liking for art? In almost every case the answer must be yes and no. A feeling for numbers and even a knowledge of advanced mathematics may be exceedingly useful in some branches of geography and play no rôle at all in others. There is a trend toward greater exactitude and less gen-

eralization in many aspects of the subject, and in these cases some mathematics is almost a necessity. A liking for the social sciences, particularly history and economics, may prove useful in political geography, cultural geography, and economic geography. A good eye for color and form will prove valuable to the cartographer. The exact sciences such as chemistry and physics can find a place in such branches of the subject as climatology, mineral geography, and soil geography. So it goes. Almost any skill may be grist for the geographer's mill. But one thing is sure, geography is an academic subject, requiring academic training. College education is a necessity, and as is the case with most academic fields, post graduate work may prove to be advisable.

Geographers at Work

It is customary to divide all geographers into two groups: those who teach and those who don't.[1] This is a somewhat shallow distinction, but it will serve our purpose here. Preparing to teach geography in the grades or in high schools is much like preparing to teach any other subject at these levels. We need not elaborate it here. It is largely a matter of acquiring a Bachelor's or Master's degree in Education. The student is given a course compounded of teacher training and familiarity with his subject matter. Such persons are usually considered professionally to be teachers rather than geographers.

At the college and university level, however, a geography teacher is usually considered to be primarily a professional geographer, though there is often a difference in emphasis between college teaching and university teaching. Most colleges are more concerned with general culture and with teaching than with research, whereas most universities feel that their faculties should make regular contributions to the advancement of knowledge. All this is much the same for geography as it is for any other academic field. But since nearly two-thirds of all college and university geography teachers find positions in the colleges, a student hoping to teach at this level should bear in mind that he needs to decide early in his career whether he is cut out for college teaching or for university teaching. Perhaps a guiding consideration should be his interest in research. Does he like to do special assignments that involve digging into source materials? University teachers who do not care for research work may find promotions slow and find themselves out of sympathy with their colleagues and their deans.

For either college or university teaching, the ability to speak easily and clearly before a group of students is a necessity. A person who is too shy to express himself well, who feels that he can never overcome this handicap, should plan to go into some other line of geography than teaching. It must be admitted, however, that many shy people have had good, if not brilliant teaching careers. Sometimes the extrovert who talks too glibly may turn out to be a poor teacher, particularly if he does not take the time to prepare his class room work well.

Those who want to do research in geography as well as to teach have addition-

1. Much of this paper has been taken with slight modifications from a pamphlet published by the Association of American Geographers in 1954. It was called "A Career in Geography," and it was intended for high school student's reading. It may be ordered by addressing the Central Office, Association of American Geographers, The Library of Congress, Washington 25, D. C.

al problems to face. In the first place, there is the constant necessity to balance research and teaching so that neither robs the other. However, it is often true that one's research interest can do much to brighten one's teaching effort. This seems to be particularly true of geography. A successful research man can often make an inspirational teacher if he is willing to share his research enthusiasm with his students. This type of teaching appeals, particularly, to students who may, themselves, be preparing for university teaching or preparing for research positions with the government or in business.

Another skill the research geographer needs is the ability to write good, clear, understandable English. Research is of little use unless the results can be written up in such a way that others can read them. This does not mean, of course, that one must decorate his prose with ornate and flowery language, but rather that he have the ability to express ideas simply and forcefully so that others can get his meaning.

Working for the Government:—Of those professional geographers who do not teach, nearly 500 are employed by government agencies—federal, state, or municipal. Most geographers who are employed by government agencies work for the Federal Government, though some have important jobs with international agencies, or with state or local government units. Some are in foreign service, some in domestic service. A considerable number travel on official business; others live abroad for extended periods. But a large majority work and live in or near Washington, D. C.

What can a geographer expect to do in Washington? Nearly 200 work for the Department of Defense, mostly civilians. Another 200 are used by the Executive and Legislative branches of the government. Many work for the Department of Agriculture, the Department of the Interior, the Department of Commerce, and the Department of State. But what specifically does a geographer do in these various places? More than half are engaged in map making, or in gathering information for maps, or acting as map librarians. Geographers, you notice, whether they are cartographers or not, never get far from maps. The Department of Defense, for instance, has a bureau known as the Army Map Service that uses many cartographers. But this same department uses geographers in its environmental research under the Quartermaster General, and others are used in the Office of Naval Research, in the Air Weather Service, in the Research and Development Board, and in the Munitions Board. Most of these jobs are research jobs, where a geographer may use his special training to good advantage.

Working for the government can bring great satisfaction. The work is often challenging and creative. Furthermore, one can feel that the work is worth while, for good government cannot be maintained without accurate information, and a geographer does have information that is useful.

Municipal Planning:—A growing field of employment for geographers is on municipal planning boards. This is a rapidly expanding field because the problems faced by cities these days are so difficult and so pressing that anyone with training along urban lines is bound to be in great demand. Here, again, cartographic training proves useful. Most of the people who enter the field of city planning through political science, eco-

nomics, sociology, or engineering are poorly trained in the use of maps.

Business Geography:—Another growing field for geographers is business geography. Of those who work for business, today, many work as cartographers for map companies or textbook companies. Some have editorial positions in book companies or with magazines. Time Magazine, for instance, employs some geographers; so do magazines like the National Geographic and the professional geographical journals. A number of geographers are engaged in location work for chain stores, some are being employed by real estate firms, railroads employ geographers for industrial location work, and geographers work for the airways and for the Ford Motor Company. In short, business geographers are spread over a wide field, working here or there as opportunities arise.

Where to Study Geography

If a student is convinced that geography is the field he wants to specialize in, his next problem is to decide where to prepare for his profession. Not all universities and colleges offer enough courses in geography to train professional geographers adequately, so a student needs to pick his school carefully. Much depends upon what he plans to do. If he plans to teach geography in the elementary or seconday schools, many teachers' colleges can give him adequate training and help him to get a job. But if he wants to teach in universities or colleges he must go to a university with a good geography department. Probably more than a hundred universities and colleges offer an undergraduate major in geography and about half of these offer work for the Master's degree. More than a score of universities offer work for the Ph. D. degree and they are listed below. One should remember, however, that the list may grow and that it is wise to check with university catalogues before making a choice.

Universities that give a Doctorate in Geography

California, U. of, Berkley, California

California, U. of, Los Angeles, California

Chicago, U. of, Chicago, Illinois

Clark University, Worcester, Massachusetts

Columbia Teachers College, New York

Illinois, U. of, Urbana, Illinois

Indiana University, Bloomington, Indiana

Iowa, State U. of, Iowa City, Iowa

Johns Hopkins University, Baltimore, Maryland

Kansas, U. of, Lawrence, Kansas

Louisiana State University, Baton Rouge, Louisiana

Maryland, U. of, College Park, Maryland

Michigan, U. of, Ann Arbor, Michigan

Minnesota, U. of, Minneapolis, Minnesota

Nebraska, U. of, Lincoln, Nebraska

Northwestern University, Evanston, Illinois

Ohio State University, Columbus, Ohio

Pennsylvania State University, University Park, Pennsylvania

Pennsylvania, U. of, Philadelphia, Pennsylvania

Syracuse University, Syracuse, New York

Texas, U. of, Austin, Texas

Washington, U. of, Seattle, Washington

Wisconsin, U. of, Madison, Wisconsin

Yale University, New Haven, Connecticut

One can, of course, begin with a school that does not offer graduate work, and for some kinds of jobs this may be enough. But if one plans to continue with geography it will be necessary to transfer to a university with a graduate curriculum in geography. As with many professions, it pays to have had one's training in a good school. Not only is the training better, but the men who teach in these schools have the best contacts for placing their students in good positions.

Many successful geographers have entered geography from other fields, and began their geography training only after reaching graduate school. Geologists, foresters, historians, economists, and various others have made the switch successfully and have found their specialized background in a neighboring field useful for a career in geography.

How Much Do Geographers Earn?

As with most professions, the earning capacity of geographers depends partly upon luck, somewhat upon perseverance, and considerably on capability. Probably the most money has been made by a few teachers who were also successful textbook writers. But these fortunate persons were exceptions; teaching is not a highly-paid profession. Good incomes are made in business geography, but the beginner even in this field must expect to start at a moderate income. Probably government employment is the most attractive form of geographic employment from the point of view of income. Upper bracket workers receive more salary than do most university professors, but it must be added, they have less time to devote to additional sources of income. Perhaps it would be safe to say that most beginners in geography, without advanced degrees, get $3000 to $4000 a year. At the other end of the scale are salaries of $7000 to $10,000. Beyond that point much depends upon individual initiative and upon the capabilities of the geographer, himself.

One thing should be mentioned here because it plays an indirect rôle in one's income. Most geographers have opportunities to travel, and if they are good research men they can find sources of funds for this purpose. The Federal Government sends many of its geographers on trips whenever field work is deemed necessary. And business geographers have frequent opportunities to travel in their work. The Federal Government has often employed university professors on temporary assignments, sending them to places all over the world. Some universities, too, have travel funds, and there are literally dozens of other sources that come to light when one begins to look for them.

On the whole, a geographer cannot expect to become rich. Few professional people do expect this in any line. But a geographer has a fairly secure income over a great many years, and he usually will have some sort of retirement plan to take care of his old age. This is, of course, in addition to the regular social security plans or old age pensions of the state or federal governments. Then, too, if he has written textbooks, he may have a royalty income that will continue long after he has retired.

Intangible Rewards

Almost any profession is rewarding

and will bring satisfaction if one is sincerely interested in it. Geography is no exception. But geographers, being the kind of people they are, find their work peculiarly rewarding. Every place a geographer reads about, whether in books or in the daily newspapers, is more real for him than it is for most others. If he has not been there, he is at least likely to know something about it, where it is, what it is like, why. Everything a geographer sees—on his trips to work, on his travels from one place to another —means more to him than it does to others. No other profession gives such a complete understanding of the scene around one. To the non-geographer the world is likely to seem a meaningless, jumbled hotch-potch. But to a geographer there is design and pattern in it, and in a sense "every prospect pleases" because he understands the reason for it or has the skill to find out.

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Geographical Organizations

THE ASSOCIATION OF AMERICAN GEOGRAPHERS

THE OBJECTIVES of the Association of American Geographers are to further professional investigations in geography and to encourage the application of geographic findings in education, government, and business. The Association supports these objectives by holding national and divisional meetings to promote acquaintance and discussion among its members and with scholars in related fields; by stimulating research and scientific exploration through the granting of sums of money for specific projects; and by performing services to aid in the advancement of its members and the field of geography. The Association of American Geographers encourages meritorious achievements in geography by awarding honors in special recognition of outstanding contributions toward the welfare or advancement of the professional. The Association publishes the periodicals *The Annals of the Association of American Geographers,* and *The Professional Geographer*; it has also issued *American Geography: Inventory and Prospect, The Nature of Geography* by Hartshorne; and a brochure *A Career in Geography.*

NATIONAL COUNCIL OF GEOGRAPHY TEACHERS

The purpose of the *National Council of Geography Teachers* as stated in the Constitution is, "to foster geographic education and to increase the effectiveness of geographic teaching, by such means as the management of the *National Council* may from time to time consider to be expedient."

"Any teacher of geography or any person or institution interested in geographic education shall be eligible for membership in the *National Council of Geography Teachers,*" so states the Constitution.

There are two kinds of membership: Annual and Contributing.

The Journal of Geography is the official magazine of the *National Council of Geography Teachers.* It is published monthly from September through May. The Journal of Geography is regarded as the world's best professional magazine in the field of geographic education.

The *National Council* also publishes a series of Professional Papers, as well as a Geographic Education Series consisting of some six volumes.

Plans for the publication of a new series have been made, and will appear shortly.

Anyone interested in geographic education is welcome into membership of the *National Council of Geography Teachers.*

THE AMERICAN GEOGRAPHICAL SOCIETY

The American Geographical Society was founded in 1852 "for the collection and diffusion of geographical and statistical information." From its inception, the Society has issued a journal and has maintained a library and map collection. In 1915, with the appointment of Isaiah Bowman as its first Director, the

institution underwent a radical change in organization, broadening the scene of its publication effort through the introduction of a series of "special" publications—including both reprints of rare geographical classics and works of original scholarsip "written in a style that will appeal to the general reader, and at the same time to the explorer, traveler, and professional geographer." A technical staff was assembled to undertake projects of both a research and a compilation nature. The history of the institution is told by John K. Wright in a book issued at the time of its centennial, "Geography in the Making: The American Geographical Society, 1851-1951" (New York, 1952, 437 pp).

At the present time, the principal activities of the Society may be described under four main categories: (1) providing service to the geographical profession through the library and map department and through consultation with the staff; (2) editing and publishing written material, both creative and educational; (3) compiling, editing, and publishing original maps; and (4) undertaking research, both original and collaborative.

Accumulated during the 104 years of its life, the Society has the outstanding geographical library in the Western Hemisphere, containing some 163,000 books and pamphlets. The Library receives regularly about 1000 periodicals from all over the world. A unique research catalog developed by the Society classifies books, articles, and selected maps both regionally and topically. The collection of some 252,000 maps and 3500 atlases is one of the major collections in the world, both in size and in selection and diversity of content. Its special catalog is coordinated with the research catalog. The collections are open to the public, and form an indispensable source for research and editorial work carried on within the building.

The Society publishes the Geographical Review, a scientific quarterly; *Focus*, a (monthly except July and August) bulletin that interprets areas and topics of current interest; and *Current Geographical Publications*, (monthly except July and August) a bibliographical tool. From time to time books are issued in several series. The most recent book publication (1955) is "Finland and Its Geography," the first in a series of handbooks designed to provide up-to-date information on certain countries of special interest in the field of international relations. A symposium volume on world forests and forest products is in press. Among research projects currently in hand are glaciological and allied studies in the Junea Icefield region of Alaska, pollen studies relating to Pleistocene forests and environments on the Pacific Coast, the preparation of a text on medical ecology and the worldwide distribution of diseases, and map projections for special purposes. The Society is cooperating in the scientific program of International Geophysical Year, and in that connection has recently completed a new map of Antarctica for the U.S. National Committee of the I.G.Y. As in the past, it maintains an interest in the furthering of and participation in scientific exploration.

Qualifications for Fellowship in the Society are an interest in exploration and travel, and in the spread of geographical knowledge; thus its members, who now number some 4500, are re-

cruited from all walks of life, and from all over the world.

NATIONAL GEOGRAPHIC SOCIETY

The National Geographic Society was organized and incorporated at Washington, D. C., in January, 1888, for "the increase and diffusion of geographic knowledge." Since 1903 it has occupied headquarters at 16th and M Streets, N. W., Washington.

Since its early years the Society has sponsored more than a hundred explorations, scientific expeditions, and projects in geography and allied sciences led by qualified specialists. Some of these have required years of field work to achieve their objectives.

In addition, members of the National Geographic staff have constantly carried out editorial and photographic surveys in all parts of the world. The results of these field trips are brought to the Society's 2,150,000 members (1955) in their monthly National Geographic Magazine as articles accompanied by maps and pictures in color and monochrome. Each year the Magazine's pages include about 50 maps and 1,100 color illustrations, chiefly from photographs. All receipts are invested in the Magazine itself or expended directly to promote geographic knowledge.

Wall maps in 10 colors are issued quarterly as supplements. The four most recent map-supplement subjects have been: Southeast Asia, Atlantic Ocean, Round About the Nation's Capital, and Alaska. Approximately 10,000,000 such 10 color maps are distributed throughout the world each year. All maps are prepared by the Society's cartographic division.

The Society's publications include illustrated books on birds, fish, everyday life in ancient times, and other educational subjects. A 432-page book on Indians of the Americas, issued late in 1955, enters its second large edition this summer. Scientific monographs detail the results of National Geographic-sponsored research.

Successive sections of the National Geographic Society-Palomar Observatory Sky Atlas are being distributed through 1956 to observatories, universities, and scientific institutions. This "portrait of the universe," in preparation since 1949, constists of 1,758 photographs of night-sky sectors taken with Palomar's 48-inch Schmidt wide-angle phototelescope.

Through its School Service Division, the Society has for 34 years published the illustrated Geographic School Bulletins through 30 weeks of the school year. Designed for secondary school use, these are supplied at nominal cost to teachers and students, as are selected color pictures, maps, back issues of the National Geographic Magazine, and other classroom aids. Through its News Service, tthe Society issues an average of 300 geographic-background bulletins annually to news outlets of every type and supplies special geographic information requested daily by the press.

The Society has awarded its Hubbard Gold Medal for outstanding achievement in exploration or geographic discovery on 16 occasions since the award was established in 1906. It has awarded nine Special Gold Medals and two Grosvenor Medals. Franklin L. Burr Prize awards in amounts ranging from $500 to $2,000 have been made annually on the average since 1933 from a special bequest fund to members of the Society's expeditions for especially mer-

itorious work in geographic science.

For its Washington area members the Society provides a winter series of 19 lectures at Constitution Hall. Each lecture is given at 4:45 p.m. and again at 8:30.

Officers of the Society (as of December, 1955) are: Chairman of the Board of Trustees, Gilbert Grosvenor; President and Editor, John Olive La Gorce; Vice President and Associate Editor, Melville Bell Grosvenor; Vice President and Secretary, Thomas W. McKnew; Treasurer, Robert V. Fleming. Research Committee Chairman, Lyman J. Briggs; Vice Chairman, Alexander Wetmore.

DEPARTMENT OF BOOK REVIEWS

WILLIAM P. SEARS, Jr., *Book Review Editor*
School of Education, New York University

BALLOT FOR AMERICANS. By Lamont Buchanan. N. Y. E. P. Dutton. 1956. $4.95.

This picture book tells the story of elections and electioneering from 1789 to 1956. It is an appropriate volume for this year of a presidential election. In addition to describing and picturing the elections and the techniques of electioneering since the days when Washington was first elected, the book also includes much on the personalities of those "who also ran" and those who "ran things from behind the scenes." The slogans, the chicanery, the bally-hoo, the honest efforts to stand by the platform issues are delightful.—WILLIAM P. SEARS.

LEARN AND LIKE IT. By Paul Mowbray Wheeler. Hingham, Massachusetts. The Palmer Company. 1955. $1.00.

This pamphlet consists of 56 pages of ways of making learning effective in a manner that should be challenging to the young college student. Its free and easy style should be appealing to the student that it is written for, one who is having difficulty in getting down to the job of learning. In addition to a brief prologue and epilogue this pamphlet contains major sections on four aspects of learning, namely: getting ready, seeing, hearing, and remembering. Since many college students fail or pass on their ability to remember the section on remembering should be especially significant. Significant in that students might pick up enough hints on methods of studying and philosophies of examinations to assist them in understanding and preparing for these examinations. Line drawings by Beatrice P. Wheeler illustrate ideas presented in the text.—JEROME E. LEAVITT.

THE GROWTH OF A NATION. By Emerson M. Brooks. N. Y. E. P. Dutton. 1956. $5.95.

The epic story of the United States is told in this pictorial review of our history from colonial days to the present. The volume contains more than three hundred pictures and a splendid text which highlights the significant events and the vivid personalities that contributed to the growth of the United States. The span is from the days of discovery to the present and every phase of American life and culture is covered. The volume should be useful in our secondary schools and more especially useful in giving new Americans a wide vista of the history of the country they have chosen for their own.—WILLIAM P. SEARS.

THE COLUMBIA. By Stewart H. Holbrook. Illustrated by Ernest Richardson. N. Y. Rinehart. 1956. $5.00.

The Columbia is the fiftieth volume in Rinehart's celebrated "Rivers of America" series. Stewart Holbrook has lived in the Northwest for many years and is eminently fit for the task of following the course of the Columbia River through the centuries. The Columbia, once called the Oregon, was first seen by white men in 1792. In 1805, Lewis and Clark's famous expedition reached the river and soon the vast area was opened to American settlers. Since those early days of frontier life, the Columbia has played an

important part in the history of our country. All fifty volumes in this informative and enticing historical series should be on the shelves of our school and college libraries.—WILLIAM P. SEARS.

BASIC PRINCIPLES OF STUDENT TEACHING. By Harold P. Adams and Frank G. Dickey. N. Y. American Book Co. 1956. $4.00.

The experience known as student teaching is, perhaps, the most vital and real experience of all teacher education. It is the culmination of the basic training that leads to entrance to the profession of teaching. How the most can be gained from this experience has been a problem for educators and student teacher supervisors over the years. In a large measure, the effectiveness of the future teacher is closely tied to the richness of his experience as a student teacher. This very practical volume has been written for the student teacher, his supervisor, and his cooperating teacher. The great emphasis of the book is on helping the student teacher put educational theory into actual classroom practice. Especially helpful are the "Action Approaches" at the beginning of each chapter. These are designed to guide the student's study. "Action Pointers," at the end of each chapter, summarize and restate the major ideas of the chapter. The book is especially well organized and eminently practical.—WILLIAM P. SEARS.

EFFECTIVE TEACHING IN SECONDARY SCHOOLS. By William M. Alexander and Paul M. Halverson. N. Y. Rinehart. 1956. $5.75.

This book has been designed as a text for course methods of secondary school teaching and as a reference for teachers in junior and senior high schools. Both the theory and the practice of modern teaching are presented as basic to an understanding of the teaching process. Part One is devoted to explaining the nature of effective teaching and the critical factors involved. Part Two deals with the organization of the classroom environment and analyzes the dynamics at work in the classroom group. The third part describes the techniques effective teachers use in working with groups of learners in the classroom situation and elsewhere. Part Four is concerned with the guidance role of teachers. The last part presents the specific jobs of teachers in planning instruction and in working for improvement. The volume is eminently practical and its organization is very effective. "Alexander and Halverson" has all it takes to become a popular and rewarding text.—W. P. S.

COUNSELING PSYCHOLOGY. By Milton E. Hahn and Malcolm S. MacLean. N. Y. McGraw-Hill Co. 1956. $4.75.

This text presents the basic theories and concepts of clinical counseling, and describes the knowledges and skills essential in sound counseling practice. The authors, both professors at the University of California in Los Angeles, stress the importance of insight into trait and factor, personality, learning, and perception theories. They also point out the place of group dynamics and of statistical orientation in the discharge of the counseling process. Aptitudes, abilities, interests, and motivations are carefully considered and the book closes with prognoses and predictions of case outcomes and the evaluation of counseling in terms of a research approach.—W. P. S.

MARRIAGE HAPPINESS OR UNHAPPINESS. By Tom R. Blaine. Philadelphia. Dorrance and Co. 1956. $2.50.

Judge Blaine is a presiding judge of the Fourth Judicial District of Oklahoma and has served in this capacity since 1942. During his long term of office, he has been greatly concerned about the matter of divorce. In this little book, the Judge draws upon his court experience and considers some of the very vital factors that make for successful marriages. He talks about divorce in non-legal terms and he discusses the psychological bases of a sound marriage relationship in most unpsychological verbiage. The volume will be useful to those who do marriage counselling.—W. P. S.

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By V. C. FINCH, G. T. TREWARTHA, and M. H. SHEARER (Westport High School, Kansas City, Missouri) Second Edition, 584 pages, $4.96

Among the many outstanding features found in this popular book are: an interesting presentation; comprehensive scope; an emphasis on meteorology and natural resources; well-chosen illustrations and maps; and accurate factual materials. It is particularly easy to teach, and offers many study helps.

ELEMENTS OF GEOGRAPHY: Physical and Cultural

By VERNOR C. FINCH and GLENN T. TREWARTHA, University of Wisconsin. *McGraw-Hill Series in Geography.* Third edition. 711 pages, $7.25

The unique feature of this text is its approach to physical geography as an analysis of the resource base for nations and peoples. The stressing of forms rather than processes fits into the author's conception of physical geography as the science which treats of the potentialities of the physical earth for human use. This provides background not only for human geography but for all the other social sciences as well.

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